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City of Delano
General Plan

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INTRODUCTION

1.1 OVERVIEW OF THE UPDATE PROCESS

The General Plan is a long-term, comprehensive framework to guide physical, social and economic development within a community's planning area. Delano's General Plan is a long-range guide for attaining the City's goals within its ultimate service area and accommodating its population growth to the year 2020. A comprehensive document, it coordinates all components of the City's physical development and sets goals, objectives, policies and standards which guide future growth within the City's planning area.

In February 1997, the City Council of the City of Delano authorized an update to the City's General Plan and associated elements including Land Use, Circulation, Open Space and Conservation, Noise, Community Design, and Public Services and Facilities. The remaining mandatory elements, Housing and Safety, were assumed by the City to be sufficiently current and were incorporated into the General Plan Update with minor reformatting only at that time.

The City Council appointed a General Plan Steering Committee to work with staff and a General Plan Consultant. The Committee consisted of representatives from the City Staff, the Planning Commission, Redevelopment Agency, City Council, Delano Joint High School District, Delano Union School District, Delano Chamber of Commerce and the development community. The Steering Committee provided crucial input and review to all aspects of the General Plan over a twelve-month period and met to review interim work products and draft policies.

In addition, five public workshops were held to discuss the General Plan Update and to seek public input into the planning process. The workshops were facilitated by the General Plan Consultant Team who asked members of the public a series of questions relating to the quality of life in Delano; what things were important to maintain; and what would they change in Delano if money were no object. Participants in the workshop were also asked to design a plan for the future of Delano. The consultant team, using the results of the workshops, formulated a list of planning principles relating to the future of Delano. The planning principles were distributed to all workshop participants and invited all participants to another workshop to review the planning principles and determine if the principles accurately reflected the public's ideas for the future of Delano. A copy of the summary of the community questionnaires is contained in Appendix A along with a summary document which indicates land use implications. These planning principles were integrated into the various goals,

policies and objectives in the General Plan. Based on these principles, the intent of the General Plan is to:

1. Promote economic growth and new commercial and industrial development in the community that increases household income, higher wages, new jobs, and reduce chronic unemployment.

2. Enhance and increase the price-diversity of housing to attract and retain professionals and managers.

3. Enhance existing and expand retailing and commercial development opportunities.

4. Enhance and improve the visual quality of the community through improvement of public facilities, increased landscaping standards and gateway improvements.

5. Manage plan area growth, including locations in Tulare County, to preserve the economic integrity and visual quality of the community.

A copy of the planning principles can be found in Appendix B.

Subsequent to adoption of the updated General Plan in January 2000, the City of Delano updated its Housing Element in accordance with the provisions of State law, which require regular updates of that General Plan element. The updated Housing Element was adopted in March 2003, and was subsequently certified by the State Department of Housing and Community Development.

In 2004, the City began a review of its General Plan, which resulted in refinement of the General Plan to enhance its value as a planning and policy document, consistent with the planning principles identified above. In particular, an economic development element was added to the General Plan along with a plan for recreation facilities. The 2004-2005 General Plan review also incorporated modifications to the General Plan land use map to better reflect community growth needs.

1.2 BASIS FOR THE GENERAL PLAN

The first step in the 1997-2000 General Plan update process was the preparation of an economic analysis for the industrial sector of Delano (Appendix C). Based upon the results of this study and previous retail/commercial analysis, the City was able to determine which types of retail/commercial and industrial uses were most likely to generate a stable economic base for the community. The General Plan land use designations reflect the land uses needed to support the City's targeted retail/commercial and industrial employers. This approach reflects the City's commitment to maintain a stable revenue base, which will support future demand for services, thus maintaining and enhancing Delano's quality of life.

1.3 ISSUES OF IMPORTANCE

Using the results of the work program, workshops and steering committee meetings discussed above, City staff and the general plan consultant concluded the following issues to be of greatest importance when drafting policies for the General Plan Update:

Agricultural Preservation – Agriculture and its related industries were determined to be crucial to not only the character of the City of Delano and its surroundings, but the key to the economic vitality of the community. Agriculture and agricultural related industries were determined to be the most important employment base for the City of Delano. The economic analysis performed for the City targeted agricultural supplies and assorted businesses.

Contiguous Planning – In order to maintain a vital economy, preserve surrounding agricultural lands, maintain a healthy quality of life and minimize public service and facility costs, it was determined that future growth within the Delano planning area should be contiguous to existing development, making the best possible use of existing vacant lands within the City limits and allowing the City to provide services to new development at the most cost-effective, efficient manner possible. The economic vitality of the City is best served by concentric growth, which maintains the existing downtown as the center of the community.

Public Facilities – A key policy throughout all elements of the General Plan is the need for new development to "pay its own way." New development will be encouraged to develop in areas which can adequately accommodate the increased demand on public services and facilities. New development will be required to contribute to the cost of providing facilities called for in the General Plan.

It is also essential for public facilities such as schools, parks and related facilities to be comprehensively planned so that there are adequate schools and recreational facilities. The community currently suffers from overcrowding of such facilities, and they should be planned as integral components of the community's various neighborhoods.

Neighborhood Development – As Delano increases in size from 34,000 to over 62,000 people by 2020, neighborhood planning will become a key component. The downtown will decrease its role as a neighborhood shopping area and transition to a specialty, service, and community commercial area augmented by office and governmental uses. New and existing residential neighborhoods will need to have augmented park facilities to provide open space.

Economic Development – Concurrent with the City's population growth has been an increasing need for local employment, as well as expanded public services and facilities. To address the City's need for economic development, Delano's Economic Development Department undertook formulation of an economic development strategy in mid-2004. The results of that strategy have been incorporated into the 2005 General Plan update, including programs to expand local employment opportunities and enhance taxable sales within the community. Included in this strategy is revitalization of the area along the east side of State Route 99, commonly known as "Block H."

1.4 ORGANIZATION OF THIS DOCUMENT

State law requires all cities and counties to adopt and maintain a General Plan. This document contains all of the General Plan elements required by state law, along with other General Plan elements that the City has determined necessary for the planning of Delano's future. These elements are organized as follows:

2.0 Land Use Element

3.0 Circulation Element

4.0 Open Space and Conservation Element

5.0 Housing Element

6.0 Community Design Element

7.0 Noise Element

8.0 Public Services and Facilities Element

9.0 Safety Element

10.0 Economic Development Element

11.0 Parks and Recreation Element

The Appendices of this document contain relevant background information and documentation supporting the policies recommended in this document, including the visioning/planning principles exercise, the economic base study, and the Delano development cost and fee study.

2.0

LAND USE ELEMENT

2.1 INTRODUCTION

The Land Use Element for the City of Delano establishes the framework for the principal development within the Study Area. The city is experiencing significant growth opportunities in terms of new development and redevelopment. It is the city's intent to guide new development and redevelopment by a set of coherent development policies in order to achieve the implementation of projects that contribute positively to all sectors of the community.

The Land Use Element describes existing land use characteristics and development patterns in the Study Area. The Land Use Element contains general development standards and guidelines for future development. The Land Use Element also contains a description of the Land Use Plan which defines the general location and development intensity for a variety of land uses in the Study Area. The Land Use Plan is intended to be consistent with the overall community goals as well as reflective of the physical and environmental constraints affecting land use.

2.2 PURPOSE

The Land Use Element is intended to reflect the values of the community with respect to development, redevelopment, and preservation of public and private properties within the Study Area through the year 2020. The element encourages future urbanization while preserving the environmental characteristics which contribute to a quality of life that attracts residents to the community. The element sets forth policies and defines land uses to achieve a balanced community, which offers a wide range of housing types, full-service business and commercial centers, and a sufficient employment base to reduce the commute for residents. While it can be expected that some existing development may not be consistent with the development policies promoted by the Land Use Element and other general plan elements, new and future development is required by law to be consistent with the general plan.

The Land Use Element encompasses the goals, objectives, policies and programs of the other elements of the general plan. The Land Use Element provides city officials with a comprehensive basis for decision-making and provides citizens with an understanding of the long-range intentions of the city concerning future growth and development.

2.3 AUTHORIZATION

California planning law requires every city to adopt a Land Use Element that provides for the long-term physical development of the community. Government Code Section 65302(a) requires the General Plan to include:

> *"A Land Use Element which designates the proposed general distribution and general location and extent of the uses of the land for housing, business, industry, open space, including agriculture, natural resources, recreation, and enjoyment of scenic beauty, education, public buildings and grounds, solid and liquid waste disposal facilities, and other categories of public and private uses of land. The Land Use Element shall include a statement of the standards of population density and building intensity recommended for the various districts and other territory covered by the plan. The Land Use Element shall also identify areas covered by the plan which are subject to flooding and shall be reviewed annually with respect to those areas."*

ENVIRONMENTAL SETTING

2.4 EXISTING LAND USE

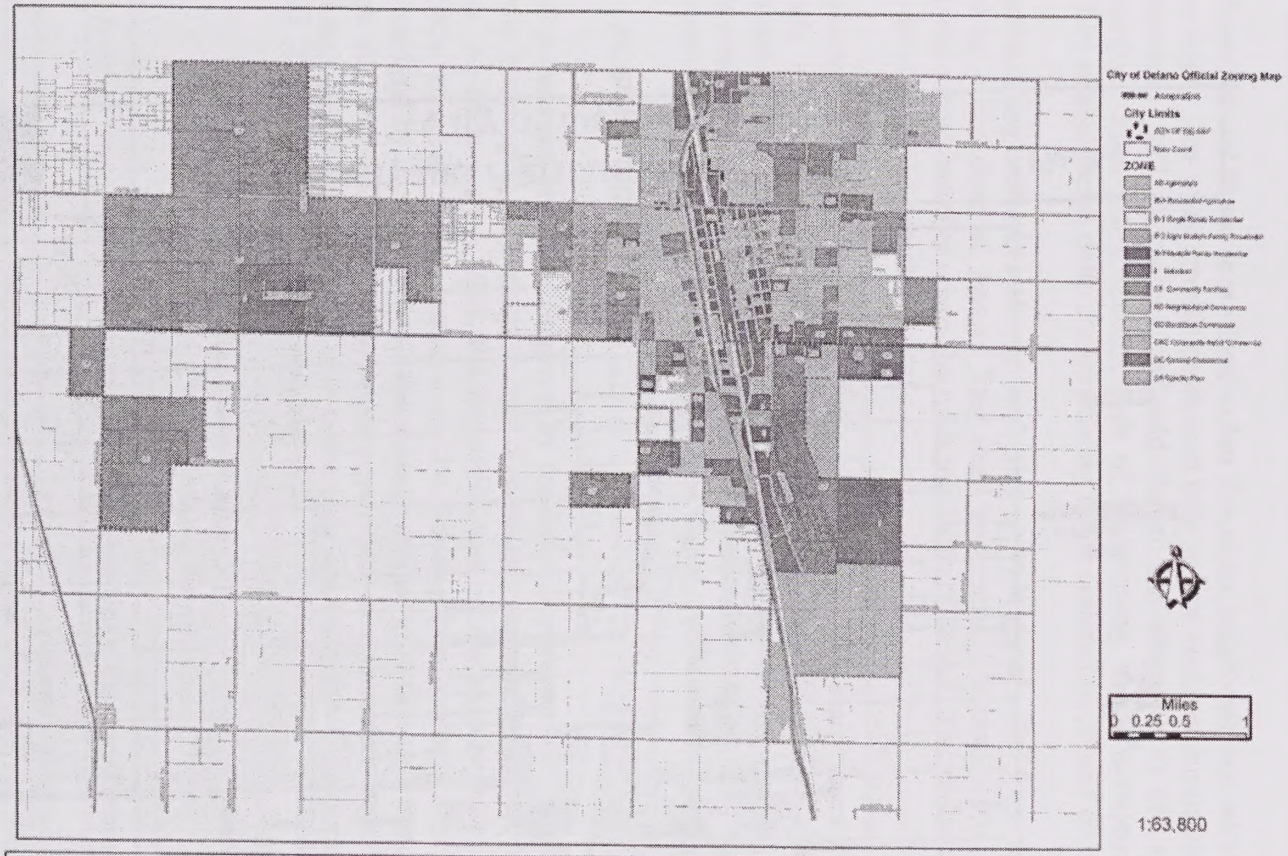
As with most cities in California, the detached single-family home is the predominant residential unit in Delano. Figure 2-1 is a zoning map of Delano showing concentrations of residential, commercial, industrial, and agricultural land as prescribed by the current City Zoning ordinance. Figure 2-2 shows the location of vacant land in the community.

2.4.1 Resources: Natural Features and Environmental Resources to Conserve

Water - Although Delano historically had drainage sloughs in the community, there are no current surface water features in Delano, except for open irrigation channels. Groundwater resources provide the City's water supply, with distribution via eight municipal water wells. The wells provide water for all uses including residential, commercial, and emergency service needs

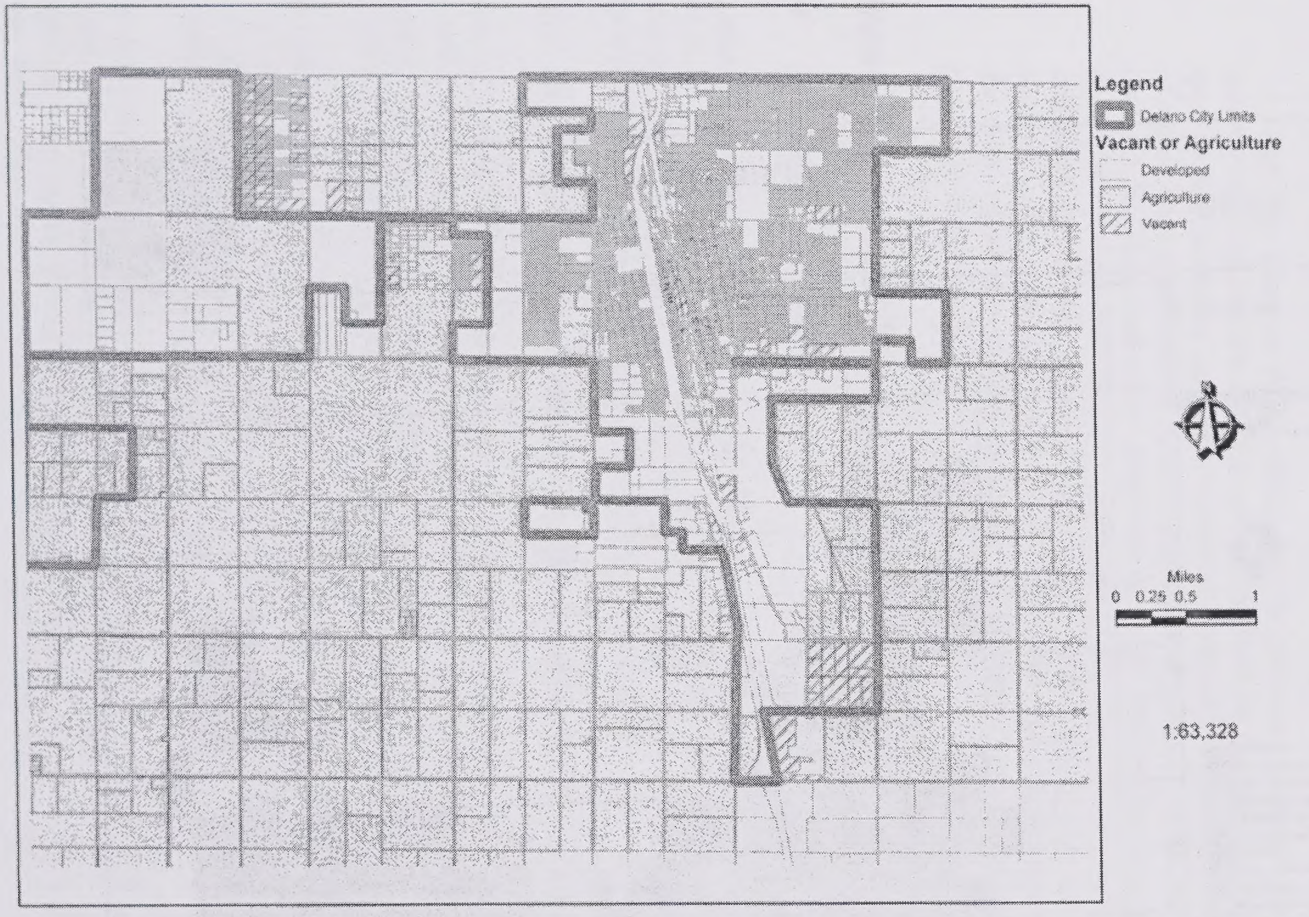
Agricultural Land Use Soils - Delano is surrounded by farmland. Farms near Delano primarily grow orchard fruits, grapes, almonds, cotton and corn. There are several locations within the City where agricultural uses are being conducted on land that has been designated for residential, commercial, or industrial uses. Most farmland is irrigated.

The soils in and near Delano are part of an extensive area of the San Joaquin Valley with "prime" agricultural (Class I and II) soils. Delano has approximately 5,000 acres of prime agricultural soil within the existing Urban Area Boundary. Approximately 1,500 acres of these prime soils within the Urban Area Boundary are under Williamson Act preserve contracts.



Zoning
City of Delano

Fig. 2-1



Vacant and Agricultureal Land
City of Delano

Fig. 2-2

2.4.2 Visual Resources

Natural Visual Resources - The topography of the City and surrounding area is generally level to gently rolling. However, on clear days Delano has beautiful views of the mountains and hills to the east.

Developed Visual Resources - Delano has few older neighborhoods with streets lined with lush, mature trees. The trees provide shade and help reduce summer temperatures. The older homes are generally well maintained and add charm and elegance to the visual character of the community. Poor visual quality, lack of landscaping and a deficiency of trees have been identified as significant deficiencies existing in the community, based on citizen input.

The surrounding orchards and crop lands also provide visual relief from the built environment by providing a backdrop of mature fruit trees and crops. During spring, the orchards provide additional visual benefits when the trees are in full bloom. The orchards also give a sense of rural character to the community.

The downtown central business district area includes the main street commercial core which currently has landscape planters and street trees installed. The visual appearance of the downtown will be improved in the near future when the recently prepared downtown master plan improvements are implemented. The Redevelopment Agency is implementing a façade improvement program which is enhancing the visual appearance of many downtown buildings.

2.5 POPULATION

Annual population estimates prepared by the State Department of Finance show that Delano is currently growing at an average annual rate of approximately 5.2 percent since the 1990 U.S. Census. As of January 1, 1998, the population was estimated to be 34,143, approximately 5,455 of which were in group quarters at the State prison. Population projections presently acknowledged by the City indicate the average annual growth rate is expected to be five percent through the year 2020 when the City's population is anticipated to be over 62,000 residents. Additional prison development will potentially increase the City population by 5,000 more persons. Table 2-1 shows these projections.

Table 2-1
City of Delano Population

Population Projections Based Upon Existing Trends					
Year	1990	1998	2000	2010	2020
Population	22,762	34,143	37,430	49,352	62,845

* Delano will add 5,000

2.6 SOCIAL AND ECONOMIC FACTORS

A recent analysis of the industrial and economic trends in California and the Delano area described the components of the regional agriculture business cluster and identified which business sectors have grown well in recent years and which have not. The material below evaluates growth opportunities in the region and outlines the types of development schemes that could form the basis for the City's industrial development strategy.

2.6.1 Growth Potential in Regional Economic Base Industries

As a part of the General Plan update process, Applied Development Economics (ADE) prepared an analysis of the economic base for the region to be used as a guide for assessing the impact of changes in the economic base expected to occur over the coming decade.

In conducting its analysis, ADE assumed that the agricultural cluster would continue to dominate the local economy. However, it was also assumed that there would be a continuing shift in the mix of businesses in the agricultural cluster toward the production of more high value added goods and services, and that employment in farming and ranching would continue to decline with the addition of labor saving technologies and processes.

The primary objective of this study was to identify those business sectors that are the most likely to produce net new jobs and increasing levels of income for Delano residents. In conducting this analysis, ADE used a methodology, which is based on detailed, industry specific data available from the Labor Market Information Division of the California Economic Development Department. This data permits employment and income trends to be analyzed over the past few years and project future trends by location, type of business, number of employees and total payroll. For this analysis, Kern, Tulare and Kings Counties were selected as the area in which most buyer/supplier relationships take place, or could take place. Statistical techniques were used to estimate the gaps in supply in the area that could be targets of opportunity for business attraction. Similarly, the analysis identifies industries represented in the economic base that offer prospects for business expansion. The following sections present the key findings and recommendations resulting from this analysis.

The Regional Context

Growth in basic jobs in California is best seen as a regional phenomenon. While individual jurisdictions are naturally primarily interested in those businesses located in their city or county, they are increasingly aware of the importance of regional economic growth for achieving their own economic growth objectives. For example, the expansion of an existing business in Delano will draw employees from the three county region. Likewise, the attraction of a new business to Delano will create the demand for goods and services from throughout the area.

Agriculture was the primary employer in all three counties, with Kern County accounting for more than ten percent fewer workers in agriculture than the other two counties. Conversely, Kern County exceeds the average for all counties and has the largest component of Services

employment of the three, reflecting the significance of Bakersfield in the region's economic base.

Kern County has a significant mining industry, which employs 6.9 percent of the labor force compared to less than one percent for the State and the other counties in the economic region. The three county economic region is lower than the State in manufacturing employment with only 8.6 percent of the labor force employed in this sector compared to almost 17 percent for the State. Kern County has the least number of workers employed in manufacturing of the three counties with six percent employed in this category compared to 12.3 percent for Tulare and 10.7 percent for Kings.

High growth rates for industrial sectors with high concentration factors signals good prospects for expansion, while those with high growth and low concentration offers potential for business attraction. Conversely, industrial sectors with high concentration and low growth may indicate the need for business retention efforts. The industries in Figure 8 of Appendix C represent the fifteen largest non-agricultural industries in each growth category.

The Agricultural Cluster

Professionals in the field of local economic development have recently come to understand that cluster analysis provides a better picture of how an economy functions than simply looking at individual business categories. Business clusters are the mix of businesses necessary to produce a final product to be purchased by a consumer. Analysis of specific clusters, such as agriculture, provides consumers with a variety of food and fiber products.

This level of detail provides an improved picture of the dynamic growth and decline in employment that is not evident at a higher level of aggregation. For example, goods and services necessary for the production of food and fiber products are hardly ever in perfect balance. There are always shortages or overages in some of the elements of the cluster. Knowing this allows public and private sector decision makers to fine tune their activities to maximize the return on their investment.

This is particularly true with respect to the availability of a labor force equal to the requirements of growing elements of business clusters, such as the agricultural business cluster, that is providing, and will continue to provide, most of the net new basic jobs in the Delano economic region. There are a number of manufacturing sectors that would be interested in expanding or locating in Delano. For example, the general industry machinery and miscellaneous food and kindred products industries are increasing net employment and could be candidates for expansion of established firms, while paperboard containers and boxes and metal cans and shipping containers, which are not well established in the area could be candidates for attraction of firms from other areas.

Conclusions and Recommendations

The City of Delano could benefit from the adoption of specific targets for business attraction and expansion. Selecting these targets would permit the assessment of the assets and liabilities of the

City based on the specific requirements of the selected targets. For example, the availability of land and facilities for business expansion and attraction can be matched against the specific requirements of the businesses targeted. Similarly, the labor force requirements of the targeted businesses can be ascertained and incorporated into the educational and training programs provided by community institutions.

The recommended targets for Delano based on the agricultural cluster analysis and existing industries in the Community include:

1. Motion Freight Transport, Warehousing and Logistics
2. Agricultural chemicals
3. Farm labor, management and services
4. Health care practitioners and services

2.7 OTHER PLANS AND POLICIES

2.7.1 Present City Land Use Controls

Development within the incorporated City limits is governed by the City zoning ordinance and building codes. The Planning Commission and City Council cannot approve development projects that are not in conformance with the General Plan and zoning regulations.

2.7.2 San Joaquin Valley Air Quality Attainment Plan

Delano is located within the San Joaquin Valley Air Basin (SJVAB) which consists of a basin shaped like an elongated bowl approximately 250 miles in length and 120 miles in width. It extends from the crest of the Sierra Nevada west to the crest of the Coast Range and includes the San Joaquin Valley floor.

2.7.3 Kern County Policy Plan

Kern County's *Urban Boundaries Policies* define the ultimate Urban Area Boundary (UAB) around incorporated cities. The Delano UAB defines the area under county jurisdiction within which Delano's concerns are to be given serious consideration as part of the County's land use review process.

Development policy north of County Line Road is controlled by Tulare County. The *Comprehensive Policy Plan of the County of Tulare* contains policies which guide growth in unincorporated areas, includes the adopted land use plans for each incorporated city in the County, and sets forth the framework for city/county cooperation in land use matters.

Tulare County and the City of Delano have entered into an agreement that a portion of the urbanized area in Tulare County along the north side of County Line Road is to be planned jointly by the City of Delano and Tulare County. In addition to a "County Line Service Area," the agreement also establishes a "Madonna Water Service Area." Pursuant to the agreement between Delano and Tulare County, Tulare County has authorized the City of Delano to provide

water, sewer, and local drainage services within the County Line Service Area, and to provide water services within the Madonna Water Service Area. The City and County have also agreed to maintain mutually agreeable General Plan policies within the joint planning area.

The joint planning of lands along the north side of County Line Road includes the principle of an equitable allocation of development benefits and impacts resulting from development on both sides of County Line Road. A guiding tenet of the joint planning effort between the Delano and Tulare County is that both the benefits and impacts of land development must balance such that neither jurisdiction is asked to bear the brunt of a development proposed by the other without appropriate mitigation and commensurate benefit. The following text sets forth the City of Delano's policy direction toward development along both sides of County Line Road. The provisions outlined below addressing requirements for development within the City of Delano along the south side of County Line shall be effective upon their adoption by the Delano City County and the adoption of equivalent provisions by the Tulare County Board of Supervisors affecting development north of County Line Road.

2.7.5 Redevelopment Planning

The City has established a Redevelopment Agency and has adopted a Redevelopment Plan and a Project Area. Within the project area, the Agency, in conjunction with the City, is removing blighted buildings and is encouraging new development in the project area, both retail and service oriented. The Agency has cleared a two block blighted area formerly know as the "Chinatown" area, and is actively marketing this approximately 12 acre area for new commercial development. The Redevelopment Agency has implemented a façade improvement program to assist downtown businesses with improving the visual appearance of downtown buildings. The Redevelopment Agency will continue to work closely with the City and Chamber of Commerce to encourage and promote economic development and the creation of new jobs. The Agency and City will implement a downtown improvement program which will include new street landscaping, street lighting, and the installation of new street furniture to enhance the visual appearance of the downtown.

LAND USE ELEMENT POLICIES

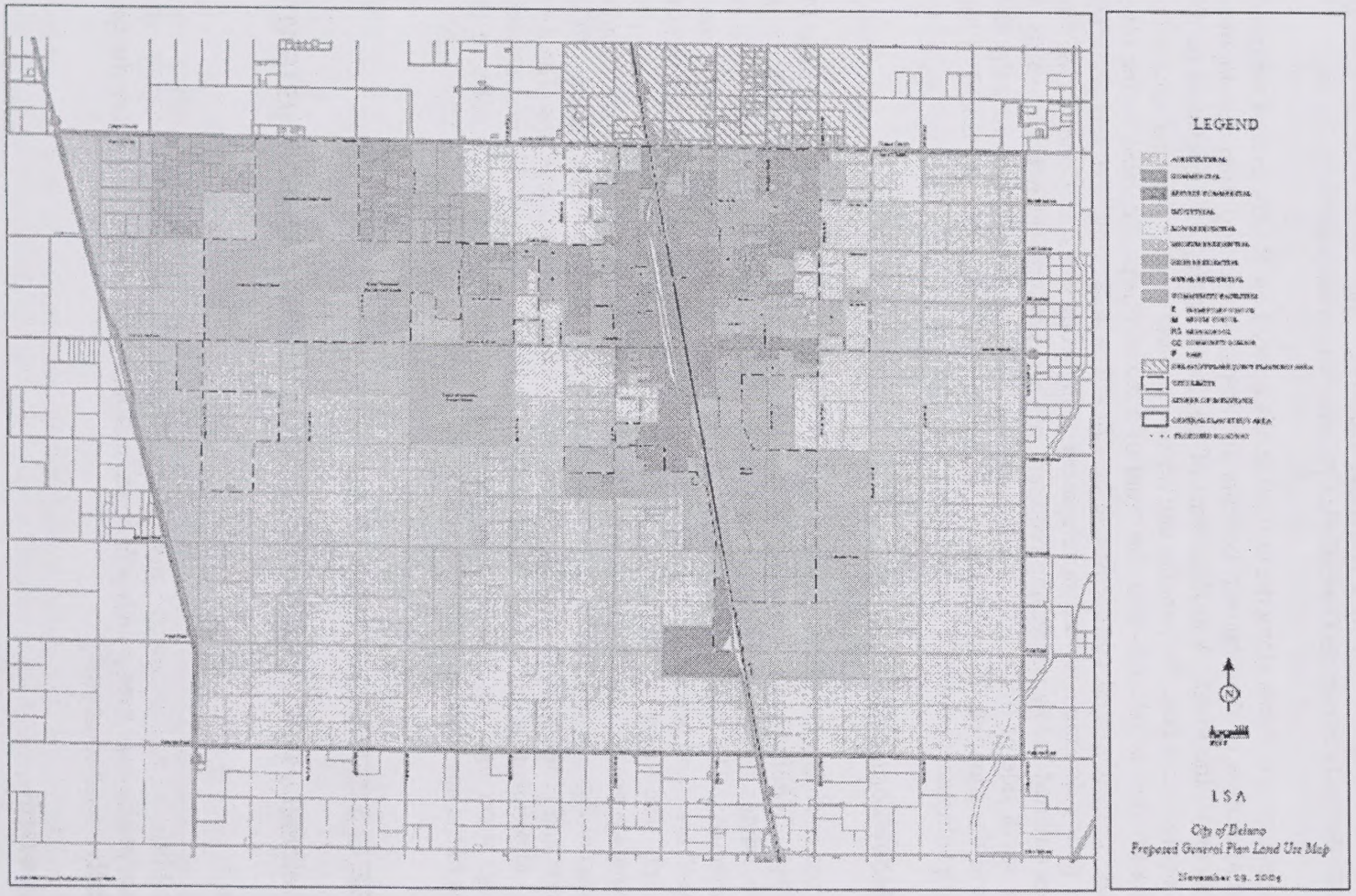
2.8 GENERAL PLAN, ZONING CONSISTENCY AND PLAN ADMINISTRATION

Objectives

A. Establish a well-balanced mix of residential, commercial, industrial, and open space/public land uses which will create and maintain a high quality environment and a fiscally sound community.

Policies, Standards

1. New development shall be consistent with the adopted land use map and policies of the General Plan.


LEGEND
LSA
City of Delano
Proposed General Plan Land Use Map
November 29, 2004

2. All development shall conform to the land use density and intensity standards depicted in the General Plan

3. Changes to zoning shall be consistent with the General Plan. A zone district shall be deemed consistent with a land use designation when such zone district is specified as consistent in the Plan Consistency Table. In no case, however, shall the overall maximum density of the plan designation be exceeded.

    a. Residential densities on a portion of a development site may exceed the maximum densities, if the density for the entire site conforms to the Plan Consistency Table. Variable residential uses and density incentives may be provided if adequate open space can be provided on the project site. Site area shall be a minimum of two acres and a Conditional Use Permit will be required.

4. The City will maintain an updated Zoning Ordinance as appropriate to implement the General Plan.

5. Development standards shall be adopted for the State Route 99 frontage and gateway streets to improve the practical function and aesthetic quality of those areas.

6. Lands outside of the existing urban area that are designated for urban use may be developed if adequate infrastructure (water, sewer, etc.) is available, and the proposed uses will not be incompatible or detrimental to surrounding land uses.

7. The City should undertake a review of the General Plan's demographic, financial, land use demand and supply, and infrastructure assumptions no less frequently than once every five years to provide an opportunity for necessary modifications to the General Plan.

8. Exterior area lighting for non-residential land uses shall be shielded to prevent line of sight visibility of the light source from abutting property planned for residential uses, or other sensitive uses.

Objectives

B. Manage land uses along County Line Road to the mutual benefit of the City of Delano and Tulare County.

Policies, Standards

1. Within the Delano-Tulare County joint planning area, establish a clearly defined Urban Improvement Area north of County Line Road within which urban development and the provision of urban services is to be confined. The Urban Improvement Area shall, at a minimum, include the County Line Service area established in the original joint planning area agreement between the City and Tulare County.

2. Development of the properties north of County Line Road within the Joint Planning Area shall be in accordance with the provisions of the Delano General Plan.

   a. Areas identified for Industrial use shall be compatible with the City's Industrial land use classification.

   b. Areas identified as Commercial shall be compatible with the City's Commercial land use classification. Commercial land uses north of County Line Road should be oriented to the freeway traveler, be served primarily by "pass-by" trips, and should not detract from the sales tax generation within the City of Delano.

   c. Areas identified for Agricultural use shall be compatible with the City's Agricultural land use classification.

3. Provision of services by the City of Delano to development within the Urban Improvement Area and the Madonna Service Area as shown in Figure 2-3 shall be contingent upon such development being consistent with the provisions of the Delano General Plan and the Joint Powers Agreement between the City of Delano and Tulare County. .

   a. Impacts of development within the joint planning area shall mitigate impacts that will result within the City of Delano pursuant to the City's standards.

   b. In cases where a development within the joint planning area would have significant unavoidable impacts within the City of Delano, ensure that there are overriding considerations that provide benefits to the City of Delano in excess of the impacts it will experience.

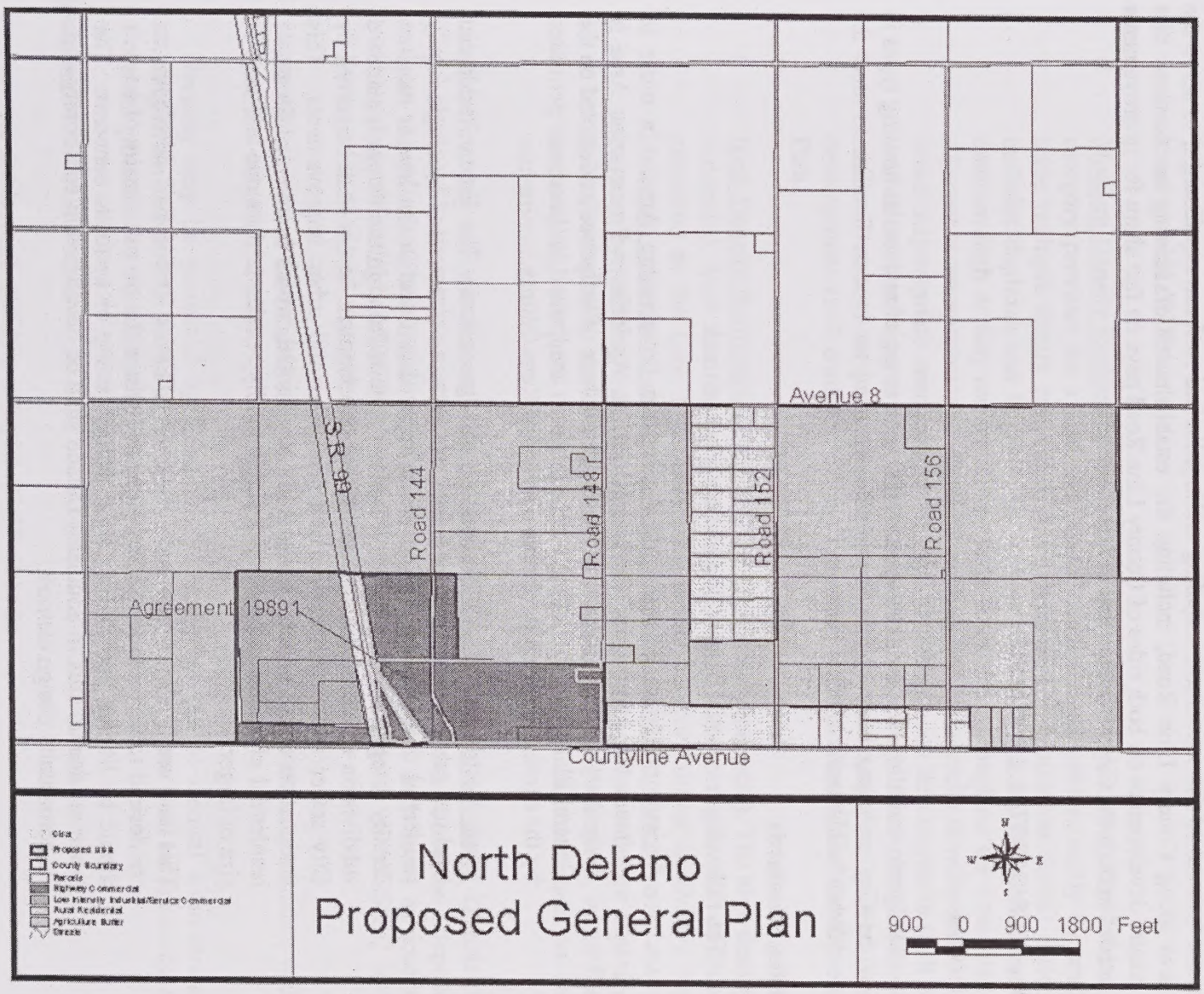
   c. Development shall pay its own way in terms of its capital and ongoing service needs from the City of Delano. Development within the joint planning area shall be at least revenue neutral to Delano.

4. Work with Tulare County to expand the existing joint planning agreement to provide for development on either side of County Line Road to mitigate impacts occurring in the other jurisdiction and to pay its own way in terms of capital costs and ongoing services that would be provided by the other jurisdiction. This would mean that new development subject to this policy would:

   a. construct and/or pay their fair share for the new capital improvements that are required to meet applicable standards, regardless of the jurisdiction that such improvements are needed in;

   b. be phased so as to ensure that the capital facilities used by the new development meet applicable standards;

   c. be at least revenue neutral across jurisdictional boundaries; and


Avenue 8
S R 99
Road 144
Road 148
Road 152
Road 156
Agreement 19891
Countyline Avenue
City
Proposed area
County Boundary
Parcels
Highway Commercial
Low Intensity Industrial/Service Commercial
Rural Residential
Agriculture Buffer
Streets
North Delano
Proposed General Plan
N
W
E
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900 0 900 1800 Feet

d. ensure that projects approved by one jurisdiction will not increase the cost of public services provided to existing development within the other jurisdiction.

5. In addition to coordination of land use planning and development review processes, Delano remains committed to working cooperatively with Tulare County for the upgrade and improvement of infrastructure, including and not limited to freeway offramps, to serve the area along County Line Road, including the establishment of funding mechanisms that ensure development on both sides of County Line Road pays its fair share for improvements needed in both the City of Delano and Tulare County. .

2.9 RESIDENTIAL LAND USE

Objectives

A. Designate and allow for the development of a wide range of residential housing types in the City including housing for lower, middle, and upper income families to meet the needs of all Delano residents.

Policies, Standards

1. The following residential density designations shall be used:

   a. Agricultural/Urban Reserve and Agriculture Preservation Area. In order to maintain the integrity of farm activities, an Agriculture Preservation Area is designated along the interior of the Delano Sphere of Influence as depicted on the General Plan map. Activities within this area are limited to those uses permitted by the exclusive agricultural zone districts of Kern County.

   b. Estate Residential (.4 – 2.75 dwelling units/gross acre). The Estate Residential land use category provides for a land use pattern characterized by single-family residential development with lot sizes larger than those in the low or medium density categories. The usual development pattern found in such areas is standard subdivision development. All residential development herein shall be served by City sewer and water services and shall have full urban improvements. This designation also includes former Rural Residential, which is intended for estate residential characterized by larger single-family residential lots one-half acre in size or larger.

      This land use is also appropriately used when "Estate Residential" developments are desired to promote larger lot homes and where the overall density of an area should be limited because of public facility, safety or aesthetic concerns. The estate residential area in Southeast Delano shall be developed in conformity with the community design element.

c. Low Density Residential (up to 5.0 dwelling units/gross acre). The low density residential category provides for a land use pattern of predominantly single-family development as permitted in the R-1 district. This designation also provides for innovative designs, which utilize clustering, duplexes or half-plexes on corner lots, zero lot line, or planned development features. Developments in excess of 7.0 units per acre are encouraged for infill parcels, in specific plan, master plan areas or with a PUD.

d. Medium Density Residential (up to14.0 dwelling units/gross acre). This land use category provides for a land use pattern characterized predominantly by small scale multiple family residential developments. The typical residential pattern includes duplexes and larger scale, high-amenity apartments. Areas designated medium-high density residential are to be integrated throughout the community adjacent to transportation, community services and commercial developments. To avoid inappropriate concentration of these facilities, such developments shall be limited to 25 contiguous units when integrated into a single family neighborhood and to 50 contiguous units when developed as a free standing development. New development shall conform to the Community Design Element of the General Plan.

e. High Density Residential (up to 24.0 dwelling units/gross acre). The high density residential land use category provides for the highest residential densities permitted in the City. It is intended that this category utilize innovative site planning, provide on-site recreational amenities, and be located near major community facilities, business centers, and streets of at least collector capacity. Such developments shall use high quality architectural design features, intensified landscaping, adequate open space, adequate parking, and adequate on-site recreational facilities.

2. The City may use the planned unit development and Planned Community District to provide density increases of up to 30%. Granting of all or part of the bonus will depend upon the developer's demonstration of the quality of design in such areas as access, circulation, building placement, parking, provision of adjacent open space, and architectural compatibility with the surrounding area.

3. Manufactured and modular housing developments shall be permitted in accordance with state law subject to design regulations and existing ordinances.

4. Housing may be permitted by Conditional Use Permit in the Central Commercial designation as part of a mixed-use concept. However, housing uses shall be discouraged on the ground floor of commercially designated properties.

Objectives

B. Promote stable, high quality residential neighborhoods.

Policies, Standards

1. Multi-family residential developments with more than 25 units shall have direct access to a collector or arterial street.

2. Where new residential development is proposed that adjoins existing commercial or industrial development, development along both sides of the land use boundary shall be required to provide appropriate buffers of architectural transitions through the use of building setbacks, landscaping and masonry walls.

3. Site development techniques should be encouraged which ensure a mix of housing types throughout the community.

4. In order to encourage infill development, flexible design standards should be developed which are tailored to the needs of the individual site, while meeting the intent of the General Plan.

5. Where feasible, multi-family developments should be located near commercial and community services.

6. Multi-family developments shall provide extensive landscaping. Block walls adjacent to the public right of way shall be discouraged unless they are found to be necessary for public health and safety.

2.10 COMMERCIAL LAND USE

Objectives

A. Ensure the provision of adequate commercial shopping opportunities and office space locations to meet anticipated needs.

Policies, Standards

1. Establish the following commercial land use designations:

   a. Commercial. The Commercial land use designation provides for the development of neighborhood commercial uses within 5-10 acre clusters to serve the everyday convenience goods and personal service needs of a defined neighborhood. The service radius of a neighborhood commercial use is generally 1/2 mile. The Commercial land use designation also provide for the development of 10-acre or larger cluster of commercial establishments serving needs similar to the neighborhood commercial centers, but serving larger areas. These community commercial areas are intended to be clustered along State Route 99 and along arterial roadways within the community. The community commercial center generally serves a market area as large as ten miles, depending upon the its

specific uses. Such facilities should be located along State Route 99, with center providing supermarkets within in each residential quadrant of the community to minimize cross-town traffic. The Commercial land use designation also provides for mixed use activity in the downtown area and within Block H between the downtown and State Route 99. It is intended to provide for a wide range of uses and to promote feasibility in the reuse of downtown buildings. Mixed use development, including residential development may be permitted within the downtown area and Block H, subject to approval of a specific plan by the City Council. The maximum allowable development intensity shall be a floor area ratio of 1.0 within the downtown and Block H area, 0.50in other portions of the City.

b. General Service Commercial. This designation provides for commercial areas with a wide range of retail and service activities along major traffic corridors. Properties abutting existing General Service Commercial properties may be developed to such use where they are combined with properties having frontage on Cecil Avenue. The maximum allowable development intensity shall be a floor area ratio of 0.50.

2. Neighborhood Commercial sites, generally 5-10 acres in size, should be located at or near the intersection of collector and/or arterial streets with a minimum of overlap with other existing or planned neighborhood commercial uses. Only one neighborhood commercial development may be permitted at any one intersection. Such developments should also be directly accessible from adjacent residential developments.

3. Community Commercial, in areas of 10 acres and larger, should be located along major traffic ways in consolidated centers that utilize common access and parking for commercial uses. Strip commercial uses are to be discouraged. Adequate pedestrian links to residential areas shall be required. New centers are proposed for Woollomes/State Route 99 and at Garces Highway and Browning Road. While adequate land needs to be reserved for community commercial use, care needs to be taken not to provide more commercial land than can reasonably be developed

4. The Commercial land use designation has been applied to the downtown area to assist in attracting and accommodating a mix of commercial, financial, office, governmental and limited residential uses.

a. Rehabilitation of existing structures to accommodate residential and office facilities in the upper floors in the CBD Commercial district are encouraged.

b. Conversion of existing residential units is encouraged adjacent to the downtown to provide for smaller scale office space.

5. Professional office land uses are encouraged within commercially designated areas, including new offices within unified centers, redevelopment of existing sites to office use, and the conversion of older homes to offices along major streets. Where homes are

converted to offices, such conversion should be a logical extension of existing or planned office/commercial uses, and the lot should be of adequate size to accommodate parking in the rear of the structure or outside of the front yard landscape setback. Zoning standards for conversion of existing residential structures should be developed.

6. Commercial and office site planning shall be compatible with the surrounding neighborhood, signage, and landscaping.

Objectives

B. Provide for the compatible integration of residential and commercial uses.

Policies, Standards

1. Development along the interface between commercial or office uses and residential uses shall provide for the following:

   a. A landscaped setback containing deciduous and evergreen trees shall be planted and maintained along the property line between commercial and office uses and residential properties that have a common property line.

   b. A masonry wall shall be erected along the property line where commercial and office uses have a common property line with residentially designated properties.

   c. All commercial loading and storage areas shall be screened from view of adjoining residential property by a combination of landscape planting and a masonry wall. Loading areas shall be enclosed and be located so that there are no noise impacts to adjacent residential properties. All storage shall be within an enclosed structure.

   d. Roof-mounted and detached mechanical equipment shall be acoustically baffled to prevent noise from the equipment from exceeding 55 dB(A) measured at the nearest residential property line.

2. In order to encourage the integration of neighborhood and community commercial uses into neighborhoods, designs should de-emphasize the usage of walls as buffers where they create barriers to pedestrian access. Continuous block walls shall be discouraged; offsets, landscaping pockets and openings shall be encouraged.

3. In order to ensure continued viability of the downtown as the central business district for the community, residential development shall be directed so that the downtown remains the approximate geographic center of the community.

2.11 INDUSTRIAL LAND USE

Objectives

A. Promote industrial sites which are functional, have adequate public services, and have access to major streets and railroads.

Policies, Standards

1. The Industrial land use designation: is intended for uses such as fabricating, assembly, research and development, electronics, warehousing and other such similar industrial uses. Light industrial development, where all work, materials, and equipment storage is generally conducted indoors, is appropriate as a buffer between heavy industrial and non-industrial uses and where the site is visible from residential areas or major streets. Special landscaping, enclosures and other site development standards should be used. Industrial park development is intended on larger parcels to create distinct districts of industrial, office, and support uses. The industrial park area shall have high quality landscaping, architectural designs, and general site development requirements. Heavy industrial uses, including manufacturing with outdoor storage equipment or work areas and wholesale distribution involving intensive truck activity should be separated from residential areas and should be located with direct access to major streets or railroads, such that truck traffic will not impact residential neighborhoods. The maximum allowable development intensity shall be a floor area ratio of 0.75.

2. Promote a mix of industrial uses that provide the City with a sound, diverse industrial base, and which is consistent with the City's infrastructure constraints.

3. Locate industry with access to major streets, truck routes, and rail service.

4. Industrial development should not create significant off-site circulation, noise, dust, odor, visual, and hazardous materials impacts that cannot be adequately mitigated.

    a. Major streets, which pass through industrial areas and serve as entrances to the City, shall receive special design treatment to reduce aesthetic impacts and traffic concerns.

Objectives

B. Provide for the compatible integration of industrial uses in the Community.

Policies, Standards

1. Industrial land shall be accessible by major and secondary arterials residential areas in the community. Truck traffic shall be routed to Hwy 99, Browning Road, Garces Highway, Woollomes, Schuster Road, or Albany St.

Objectives

C. Provide for the use and re-use of light industrial properties in the downtown to complement adjacent commercial, office and residential land uses.

Policies, Standards

1. The City should encourage redevelopment of industrial properties which are near the downtown to provide for adequate on-site parking, loading and unloading facilities, vehicular and truck circulation.

2. Limited expansion of existing non-conforming uses in this area may be permitted subject to an analysis of site area limitations, land use compatibility with surrounding land uses, environmental impacts and economic factors. Expansion or increases in intensity may be permitted through the Conditional Use Permit process.

2.12 PUBLIC AND INSTITUTIONAL LAND USE

Objectives

A. Provide sites for adequate public facilities to serve projected growth.

Policies, Standards

1. Establish the following public facility land uses:

   a. Public Buildings and Grounds. This designation indicates areas owned and maintained by public or institutional agencies such as the city, schools, hospitals, and other special districts.

   b. Parks and Open Space. This designation determines areas of permanent open spaces, parks and/or areas precluded from major development.

2. Sites depicting Public Buildings and Grounds or Parks and Open Space are conceptual and may be located anywhere in the same general vicinity.

Objectives

B. Provide for adequate school sites and school site expansion to meet school facility needs in a timely manner as provided by law.

Policies, Standards

1. Provide information to the Delano Elementary School District and the Delano Union High School District regarding new residential development projects proposed to be constructed in the City.

2. Coordinate school location and site design with the school districts to ensure that adequate facilities are available.

3. Delano will support school site identification, reservation, and acquisition that is consistent with California Government Code Sections 66479-66482. The City will adopt a school site reservation ordinance to be applied to proposed development projects.

4. Elementary schools should be located on interior residential areas at collector/local street intersections. Additional street frontage is desirable to provide a transition area to adjacent residences. Schools should abut neighborhood parks with adjacent development backing or siding onto the school. Pedestrian and bicycle access should be provided.

5. Intermediate or Junior High Schools should be located in residential areas with a central location for surrounding area elementary schools at collector/collector or collector/local street intersections. Additional local street frontage is desired for transition to adjacent residential areas. Maximize pedestrian and bicycle access and on/off-site circulation. These schools should be located so that there are future expansion opportunities.

6. High Schools should be located at arterial-collector intersections with additional frontage on at least one other street. These sites should be located to provide for future expansion.

7. New commercial development should be discouraged within a minimum of 1/4-mile of school sites.

8. High Density Residential complexes abutting school sites should be discouraged.

9. The City and school districts shall continue to encourage joint use of school multi-purpose facilities and open space.

10. The school districts shall be encouraged to coordinate their school location, facility construction and phasing with the City's development guidelines contained in the Land Use Element and the City's Capital Improvement Plan to ensure that school facilities are located in areas where there are planned and programmed streets, sewerage, storm drainage systems and other necessary infrastructure.

11. It is the policy of the City that adequate school facilities be available to serve new development. In implementing this policy both the City and school districts recognize that State law provides that the provision of school facilities is the exclusive responsibility of the State and the respective school districts. However, since the potential may still exist that sources of financing, including statutory developer fees, state and local school bond monies and other state funds will be inadequate, and the City shall work with the school districts to identify opportunities for joint funding of recreation and community facilities at school sites.

12. The status of school impact mitigation shall be reviewed in accordance with Policy 2.7.A.9.

Objectives

C. Ensure that land uses in the vicinity of the airport are compatible with airport operations

Policies, Standards

1. Land use intensity and use shall be in accordance with City of Delano Airport compatibility criteria indicated on Table 2-2 for the zones indicated on Figure 3-5.

Table 2-2
Compatibility Criteria
Kern County Airport Land Use Compatibility Plan

Zone	Location [1]	Impact Elements	Maximum Densities		Required Open Land [4]
			Residential[2] (du/ac)	Other Uses (people/ac)[3]	
A	Runway Protection Zone or within Building Restriction Line	< High risk < High noise levels	0	10	All Remaining
B1	Approach/Departure Zone and Adjacent to Runway	< Substantial risk — aircraft commonly below 400 ft. AGL or within 1,000 ft. of runway < Substantial noise	0.1	60	30%
B2	Extended Approach/Departure zone	< Significant risk — aircraft commonly below 800 ft. AGL < Significant noise	0.5	60	30%
C	Common Airport Environs	< Limited risk — aircraft at or below 1,000 ft. AGL < Frequent noise intrusion	15	150	15%
D	Other Airport Environs	< Negligible risk < Potential for annoyance from overflights	No Limit	No Limit	No Requirements

Zone	Additional Criteria		Examples	
	Prohibited Uses[5]	Other Development Conditions[8]	Normally Acceptable Uses [9]	Uses Not Normally Acceptable [10]
A	< All structures except ones with location set by aeronautical function < Assemblages of people < Objects exceeding FAR part 77 height limits < Hazards to flight [6]	< Dedication of aviation easement	< Aircraft tiedown apron < Pastures, field crops, vineyards < Automobile parking	< Heavy poles, signs, large trees, etc.
B1 and B2	< Schools, day care centers, libraries < Hospitals, nursing homes < Highly noise-sensitive uses (e.g. amphitheaters) < Storage of highly flammable materials[7] < Hazards to flight [6]	< Locate structures maximum distance from extended runway centerline < Dedication of aviation easement	< Uses in Zone A < Any agricultural use except ones attracting bird flocks < Warehousing, truck terminals < Two-story offices < Single-family homes on an existing lot	< Residential subdivisions < Intensive retail uses < Intensive manufacturing or food processing uses < Offices with more than two stories < Hotels and motels
C	< Schools < Hospitals, nursing homes < Hazards to flight [6]	< Dedication of over-flight easement for residential uses	< Uses in Zone B < Parks, playgrounds < Most retail uses < Duplexes and medium-density apartments < Two-story motels	< Large shopping malls < Theaters, auditoriums < Large sports stadiums < Hi-rise office buildings with more than four stories
D.	< Hazards to flight[6]	< Deed notice required for residential development	< All except ones hazardous to flight	<

See NOTES on following page.
Source: Comprehensive Airport Land Use Plan (1996)

Table 2-2 (Continued)
Compatibility Criteria
Kern County Airport Land Use Compatibility Plan

NOTES:

1. Zones may also apply elsewhere if an airport has atypical operational procedures or specialized aircraft activities.

2. Residential parcels should not contain more than the indicated number of dwelling units per gross acre. Clustering of units is encouraged as a means of meeting the Required Open Land requirements.

3. The land use should not attract more than the indicated number of people per acre at any time. This figure should include all individuals who may be on the property (e.g., employees, customers/visitors, etc.). These densities are intended as general planning guidelines to aid in determining the acceptability of proposed land uses. Special short-term events related to aviation (e.g., air shows), as well as non-aviation special events, are exempt from the maximum density criteria.

4. Open land requirements are intended to be applied with respect to the entire zone. This is typically accomplished initially as part of the community's general plan or a specific plan.

5. May be modified by airport-specific policies or decision of local governing body with appropriate adopted findings based upon evidence in the record.

6. See Kern County Airport Land Use Compatibility Plan Policy Section 3.3, Airspace Protection.

7. Within the B1 and B2 zones, only the following flammable materials are permitted: aviation fuels, other aviation-related materials, and up to 2,000 gallons of nonaviation materials.

8. These conditions do not apply to ministerial actions.

9. These uses typically can be designed to meet the density requirements and other development conditions listed.

10. These uses typically do not meet the density and other development conditions listed. They should be allowed only if a major community objective is served by their location in this zone and no feasible alternative location exists.

Source: Comprehensive Airport Land Use Plan (1996)

3.0

CIRCULATION ELEMENT

ENVIRONMENTAL SETTINGS

3.1 INTRODUCTION

This section discusses the existing circulation system in the Delano area and reviews the current plans and related issues that affect the Circulation Element. Also included is an analysis of the operating condition of the current circulation system along with identification of traffic problems within the community. Other alternative transportation modes including transit, aviation, rail, bicycle and pedestrian, truck, transportation management systems, goods movement, and parking are discussed.

3.2 PURPOSE

The Circulation Element was first required by state law in 1955. Since then, transportation technology and needs in California have changed greatly, with the emphasis today on the development of a balanced, multi-modal transportation system. According to state law, the policies and plan proposals of the Circulation Element should:

- Coordinate the transportation and circulation system with planned land uses;
- Promote the efficient transport of goods and the safe and effective movement of all segments of the population;
- Make efficient use of the existing transportation facilities; and
- Protect environmental quality and promote the wise and equitable use of economic and natural resources.

The Circulation Element should cover the following to the extent that they pertain to the community:

- Streets and highways;
- Parking provisions;

- Transit and paratransit;
- Railroads;
- Air transportation; and
- Bicycle and pedestrian facilities.

The policies and plan proposals of the Circulation Element should be coordinated closely with those of the Land Use, Housing, Noise, and Community Design Elements.

3.3 AUTHORIZATION

Government Code Section 65302(b) states the following as the mandatory requirement for General Plan Circulation Elements:

> *"A Circulation Element consisting of the general location and extent of existing and proposed major thoroughfares, transportation routes, terminals, and other local public utilities and facilities, all correlated with the Land Use Element of the plan."*

3.4 EXISTING TRANSPORTATION AND CIRCULATION

3.4.2 Existing Plans and Elements

The Delano Circulation Element has been prepared to be consistent with the other plans or elements currently in effect. This consistency is a requirement of all elements of the community's General Plan. The following are the plans that have been used in the development of this Element.

- City of Delano, Final Transit Development Plan, prepared by Max Bacerra & Associates, June 1997
- City of Delano, Municipal Airport Master Plan Update, prepared by Aries Consultants Limited, October 1992
- City of Delano, Subdivision Standards
- City of Delano, Enter Prior Zone Boundary Map
- Downtown Delano Circulation Study, prepared by QUAD Consultants, May 1994
- Kern Council of Governments, Regional Transportation Plan, 2005
- Peters Engineering Group, City of Delano Circulation Element Supplement, May 17, 2005.

3.4.3 Streets and Highways

This sub-section describes the existing conditions of the community's street and highway network. Also included is a discussion of functional classification, street capacity, and Level of Service. The sub-section will close with an assessment of the system's existing operating conditions and problems.

Functional Classification

A community's street system is composed of a wide range of facilities. Street and highway facilities serve two basic functions, mobility and land access. Mobility means the provision for the movement of motorists between their points of interest or from one place to another. Land access means providing for the parking, storage or driveway access at the origin or destination of a person's trip.

Each facility type in a circulation element is designed to emphasize to varying degrees the mobility or land access function. Some facilities emphasize land access over mobility, while other streets emphasize mobility over land access. The following hierarchy delineates the typical function of the facilities used in this circulation element.

Table 3.1
Functional Classification

Facility Type	Emphasis
Freeway	Mobility with no direct land access and access limited to interchanges.
Expressway	Mobility with more frequent access to arterials but no direct land access.
Major Arterial	Mobility with connections to freeways, arterials and other collector streets, and limited access to traffic generators.
Arterial	Mobility with connections to other arterials, collectors, some local streets and major traffic generators.
Collector	Connects local streets with arterials, also provides access to adjacent land uses; balances mobility and access.
Local	Access to adjacent land uses only; no mobility function.

Freeways

Table 3.1 shows that freeways are designed to provide for higher volumes of traffic at higher speeds, over longer distances. Greater volumes and speeds require limited access, which is generally regulated by interchanges spaced at a minimum of one mile in urban areas, and two miles in rural areas. Within the City of Delano, interchanges between Garces and Cecil do not meet this standard.

Expressways

Expressways, like Freeways, provide for higher traffic volumes, at higher speeds and longer travel distances. Access is provided via at-grade intersections, generally spaced no closer than one-half mile apart. Expressways are intended to provide a high level of capacity in selected high volume corridors.

Major Arterials

Major Arterials provide access to major travel generators and are typically designed with six lanes for through traffic, a parking/transit/right turn lane, and a median with dual left turn lanes at intersections. Access to adjacent land uses is limited. Arterials provide for moderate volumes at moderate speeds and distances, with access to other arterials and collectors at half-mile intervals, and access to local streets and collectors at quarter mile intervals.

Arterials

Arterials are intended to provide the majority of a community's traffic carrying capacity. Arterials provide connections via interchanges to the freeway system and to other arterials and collectors via intersections. Arterials, more than any other type of street, illustrate the conflicts which may arise between the provision of access and mobility. Typically, arterials are designed with two through lanes in each direction, a median with a left turn lane, and transit stop/right turn lanes on each side.

Collectors

Collectors are intended to provide connectivity between local streets and the arterial street system. Collectors also provide access to major activity centers (commercial or employment) and some abutting land uses. Collector streets are typically designed with one through lane in each direction, a left turn lane, and parking/right turn lane/transit stop areas on both sides.

Local Streets

Local Streets are intended to provide direct access to abutting land uses. Movement of traffic is the secondary purpose for local streets. Local streets should not carry through traffic. Local streets also serve as easements for utilities. Typically, these streets are designed with one lane in each direction and parking is provided on both sides.

The proper designation of the community's street network can assist in the development of an efficient system for both mobility and access. The proper balance not only ensures that a street is sized to function properly, but it allows a community to properly allocate its resources to the streets needing additional capacity or improvements. A properly designed system will also prevent the use of local streets for through trips or the overburdening of freeways, expressways, and arterials with traffic.

Problems begin to occur in a system when a street that is designated to provide mobility is asked to provide land access. Land access typically requires driveways and on-street parking to adequately address the land access function. When many access points or on-street parking is provided, traffic

conflicts occur and the facility loses its ability to provide for mobility. Likewise, when a street designed for access is asked to provide for mobility, conflicts occur. This generally happens on arterial and collector streets that were not developed with adequate access control or on local streets that are asked to carry through traffic.

Existing Street System

The following describes the existing circulation system for the community.

State Highways and Freeways

State Route (SR) 99 runs in a north-south direction through the center of the City. SR 99 is a major freeway, which connects Northern California and Southern California. The facility provides for regional movement and inter-regional access through the Central Valley from Bakersfield to Sacramento. The freeway is a four lane divided facility that is currently being upgraded to a six lane, divided freeway. A number of the interchanges along State Route 99, including Garces, Cecil, Fourth, Avenue, Eleventh Avenue, and County Line Road are substandard, and in need of improvements.

SR 155 is a two lane, undivided highway in the study area. In the City of Delano, SR 155 is comprised of a two-way couplet that runs north and south fronting SR 99 between the SR 99 at 9th Avenue ramps and Garces Highway. The west portion of the couplet is designated as Ellington Street and the east portion of the couplet is designated as Fremont Street in the City of Delano. Both portions of the couplet are designated as collectors. SR 155 also runs in an east-west fashion through the City of Delano east of SR 99. This portion of SR 155 is designated as Garces Highway and is classified as a major arterial. SR 155 connects to the Sequoia National Forest entrance east of the City.

Arterials

There are six arterials designated in the Delano Urban Area. Generally, arterial streets are developed with right-of-way widths of 90' - 110' depending on medians and turn lane requirements. Delano does not have an arterial developed to full arterial standards, which is four lanes with a center median. Most of the existing arterials in the community are two lanes in each direction and with some left turn lanes at signalized intersections.

County Line Road, Cecil Avenue, Garces Highway, and a portion of Woollomes Avenue are the City's east-west arterials. Cecil Avenue and Garces Highway are the primary east-west arterials servicing the City. The majority of Garces Highway is a two lane undivided facility. The majority of Cecil Avenue is a four lane undivided facility where the street passes through the City. The area between Cecil Avenue and Garces Highway, east of SR 99 is considered to be the City's central business district.

The north-south arterials in the community are Albany Street, High Street, and Browning Road, which are all located within the City limits. Albany Street delineates the City's western boundary. High Street runs parallel to SR 99 and serves as the primary north-south arterial in the central City area. Albany Street, High Street, and Browning Road are two lane, undivided facilities. Browning Road marks the current eastern boundary of the City limits.

Arterial Streets

North-South	East-West
Albany Street/ Stradley Road	Cecil Avenue
Browning Road	County Line Road
High Street	Garces Highway
Hiett Avenue	Woollomes Avenue (portion)
Randolph Street	Schuster Road

Collectors

All or portions of the following streets are currently designated as collector streets in the Delano area. Collectors are currently constructed on 60' - 80' right-of-ways with one lane in each direction and parking on both sides.

Collector Streets

North-South	East-West
Princeton Street	13th Avenue
Ellington Street	9th Avenue
Fremont Street	11th Avenue
Garzoli Avenue	20th Avenue
Girard Street	Woollomes Avenue (portion)
Lexington Street	
Norwalk Street	
Clinton Street	

Local Streets

The remainder of the streets in the community are classified as local. Local streets are typically 50' - 60' right-of-way with two lanes and parking on each side.

Gateways and Scenic Corridors

There are no designated scenic corridors identified in Delano. Gateway streets have been designated for Fremont Street, High Street, Cecil Avenue, Glenwood, Ellington Street, Garces Highway, County Line Road, Browning Road, Albany Street, and Woollomes Avenue.

Roads Of Regional Significance

Regional access to the Delano area exists through freeways and rural roadways. Roadways that provide regional access to the community of Delano include Albany Street, Browning Road, Cecil

Avenue, Garces Highway (SR 155 east of SR 99), and State Routes 43, 46, and 99. Figure 3-1 identifies the Regional Roadway System for the City of Delano area.

Albany Street is a north-south arterial on the western edge of the Delano City limits. It provides access to McFarland to the south. Albany Street is a two lane undivided facility. Browning Road is also a north-south arterial located east of Delano. Browning Road extends south to McFarland and provides access to SR 99 in McFarland. Browning is a two lane undivided road. Cecil Avenue is an east-west facility running through the center of Delano that connects to SR 43 to the west and rural areas to the east. It is a 2-4 lane undivided facility from Albany to Randolph and a two lane undivided facility in the rural areas.

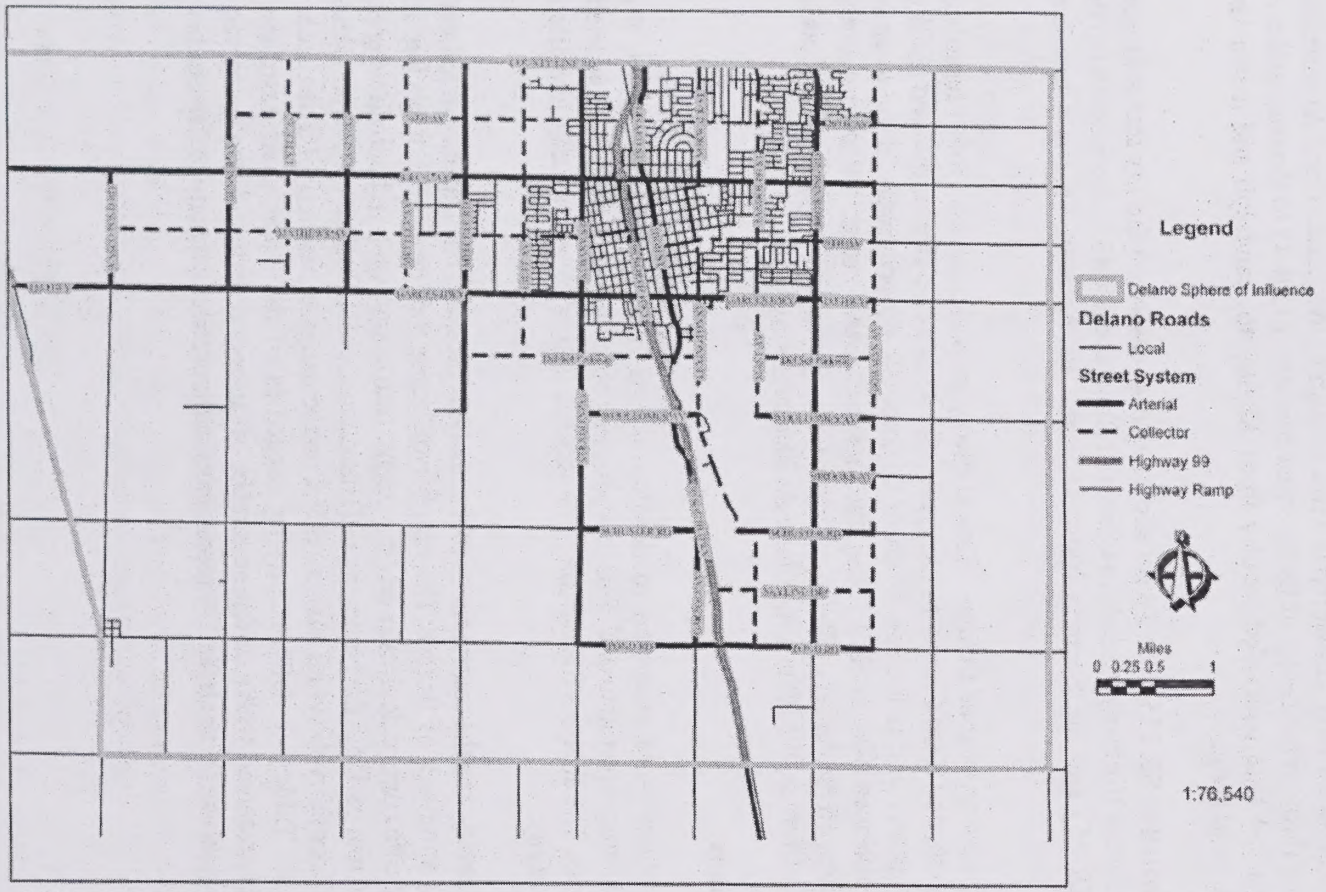
Garces Highway, designated as SR 155 from SR 99 east, is also an east-west facility that is located to the south of Delano. Garces Highway extends to Corcoran Road and SR 43 to the west and to the Porterville Highway (SR 65) and the Sequoia National Forest to the east. This is a two lane undivided facility.

SR 43 is a north-south highway west of Delano. This highway provides access from Fresno and Tulare Counties to the north, and Kern County to the south. SR 43 is a two lane undivided facility. SR 46 is an east-west highway and is located south of Delano. SR 46 originates in the town of Famoso, at SR 99, and continues west to SR 1 along the Pacific Ocean's coast. SR 99 is a north-south freeway that runs through the center of Delano. This major regional facility provides access to Northern and Southern California. SR 99 is a four lane divided highway.

Existing Traffic Conditions

The existing traffic conditions were evaluated to develop a base line, or beginning point, for understanding Delano's existing street network. This analysis was completed for freeways, selected arterials and collector streets. The analysis focused on three specific issues: street capacity, classified system pattern and connectivity.

The evaluation of street capacity was the central focus of the analysis process. The capacity of a street or highway is affected by a number of factors. The number of lanes; the location and spacing of intersections; the type of traffic control devices used (stop signs, traffic signs, etc.); the traffic signal timing plan; the use of on-street parking; the percentage of trucks; the level of transit activity; and the number and location of adjacent driveways all have an effect on the carrying capacity of a particular street or highway segment. Table 3-2 defines carrying capacities of the street facilities in the community. Each facility is presented with a different number of lanes and with different geometric characteristics. The capacity shown for each facility represents the theoretical capacity of the street at LOS "E."



Circulation Plan
City of Delano

Fig.3-1

Table 3-2
Capacity of Functionally Classified System

Facility	Geometrics	LOS "E" Theoretical Capacity [1]	LOS "C" Theoretical Capacity
Freeway	4 Lane	63,800	49,600
	6 Lane	95,700	74,400
Major Arterial	4 Lane-divided	29,400	22,800
	6 Lane-divided	44,500	34,600
Arterial	2 Lane-divided	13,800	10,700
	4 Lane-divided	28,800	22,400
	6 Lane-divided	43,700	34,000
	2 Lane-undivided	13,100	10,200
	4 Lane-undivided	23,000	17,900
	2 Lane with lefts	13,400[2]	10,400
	4 Lane with lefts	27,360	21,300
Collector	2 Lane-divided	11,100	8,600
	4 Lane-divided	23,000	17,900
	2 Lane-undivided	10,600	8,200
	4 Lane-undivided	18,400	14,300
	2 Lane with lefts	10,800[2]	8,400
	4 Lane with lefts	21,800	17,000
Local		5,000[3]	5,000

Notes:

1. Daily two-way traffic volumes representing 99% of the street's capacity
2. Includes left turn pockets and two-way continuous left turn lanes estimated from 2 lane divided and 2 lane undivided capacities
3. Estimated capacity for local streets

Source: Florida's Level of Service Standards and Guidelines Manual for Planning, Florida's Department of Transportation, 1992.

The table delineates the capacities of the various street segments to be evaluated. The capacity is defined as the number of cars (vehicles) per lane that pass a specific point during a twenty-four hour period.

The evaluation of a street's capacity introduces the concept of level of service (LOS), which is defined as a qualitative measure describing operational conditions within a traffic stream, and the perception of these conditions by motorists. A specific level of service definition generally describes these conditions in terms of factors such as speed and travel time; freedom to maneuver; traffic interruptions; comfort and convenience; and safety. There are six LOS designations ranging from "A" to "F," with "A" representing the best operating condition and "F" representing the worst. At LOS "E," the street begins to operate less efficiently and the driver is subject to excessive delays.

The Level of Service for each critical street segment has been calculated using volume capacities from the Florida Department of Transportation's *Florida's Level of Service Standards and Guidelines Manual for Planning*, April 1992 (Florida Tables). This manual provides a method for evaluating freeways, expressways, arterials, and collectors. This method was selected for this analysis because of its intended use in planning studies and its consistency with adopted procedures for the Kern Council of Governments (Kern COG).

The Florida Tables are generalized planning tables based on the definitions and measurement techniques of the 1985 Highway Capacity Manual. This methodology incorporates signalization characteristics (number of signals per mile) and roadway characteristics (number of lanes, left-turn pockets, divided/undivided) into the LOS determination. The Florida Tables separate facility types into freeways, state arterials with both interrupted (signalized) and uninterrupted (non-signalized) flow, and non-state roadways. Within these various classifications, the facilities are separated by number of lanes and divided versus undivided. There are also adjustments for facility types not given in the tables. For each facility type under each classification are levels of service A through F with corresponding traffic volumes. These volumes are the maximum amount of traffic that a given facility with given characteristics can carry and maintain a given LOS. This maximum volume per LOS is also called the capacity of the facility. Appendix D contains copies of the Florida Level of Service Tables used in evaluating the Delano circulation system.

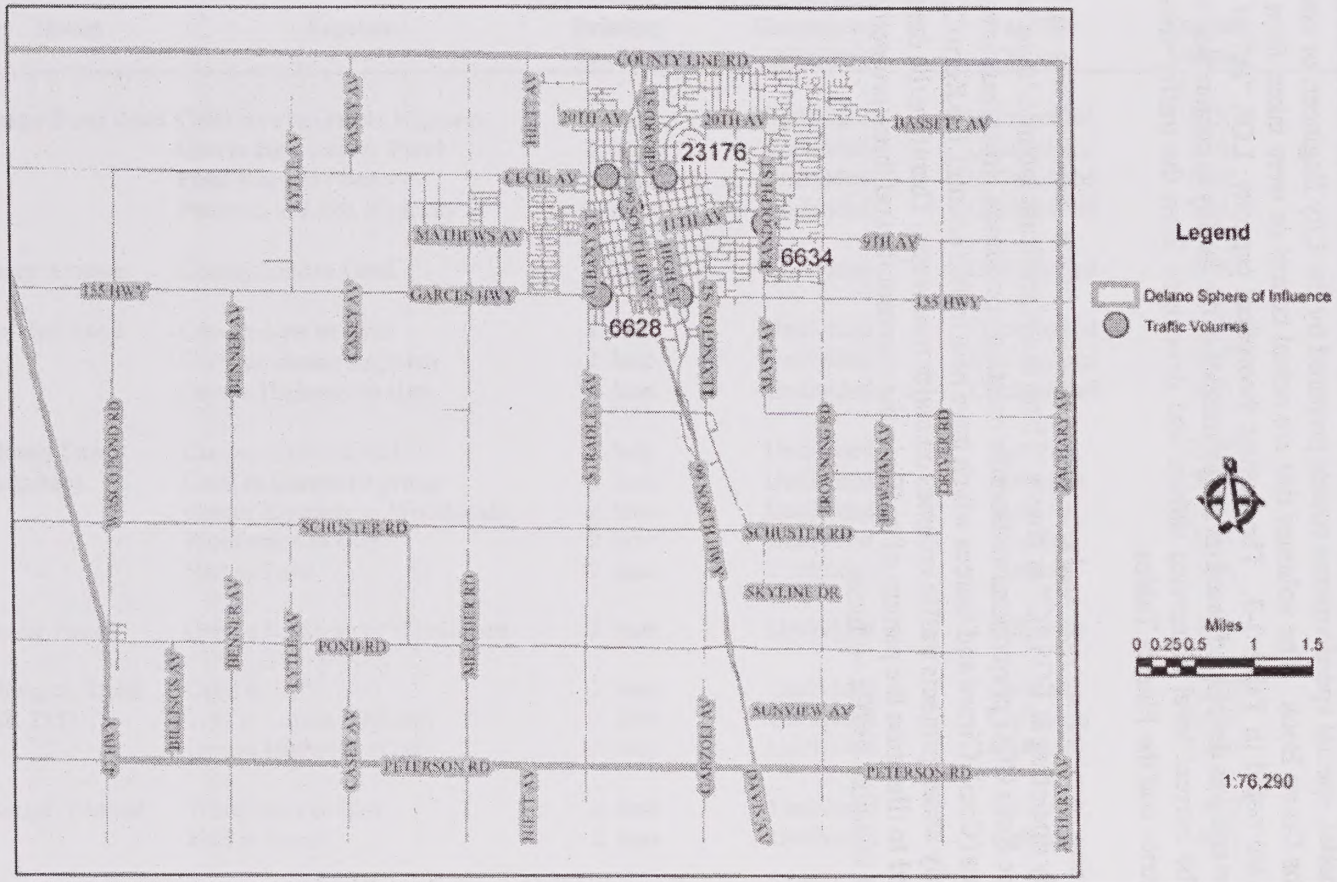
As can be seen on the Florida Tables shown in Appendix D, higher level of service values may not be achieved on interrupted flow facilities even with extremely low traffic volumes. As stated in the Florida Tables manual, "these higher quality levels of service cannot be achieved primarily because the signalization characteristics simply will not allow vehicles to attain relatively high average travel speeds." Therefore, when looking at the circulation tables in the General Plan and it's EIR, streets labeled as collectors will never attain LOS "A" and "B." Likewise, arterials with a higher number of signals will never attain LOS "A".

Existing Traffic Volumes

To complete the assessment of existing 1997 traffic conditions in Delano, the Kern COG traffic model, the CalTrans 1995 Traffic Volumes Report, and 1997 count data was used. Kern COG's model has the capabilities to estimate traffic volumes for any given roadway based on actual counts taken in recent years. The existing conditions assessment includes City streets and County roads. Traffic volumes shown in Figure 3-2 reflect average daily traffic in vehicles per day.

Existing Level of Service

The traffic volumes delineated on the following page were used to evaluate the operating conditions of the existing street and highway system. The analysis was based on the relation of the existing traffic volume of the street to the current maximum capacity volume of the street.



Traffic Volumes
City of Delano

Fig. 3-2

The City has set its level of service standard at LOS "C," except at freeway interchanges and other high volume locations, where LOS "D" is used. CalTrans adopted level of service standard is LOS "D."

Table 3-3 lists the analyzed streets by segment. A brief description of the existing geometrics (number of lanes) and the facility type is provided. The existing traffic volumes shown in Table 3-2 are either 1997 counts supplied by the city, 1998 counts supplied by the City's consultant ATE, estimated from the 1997 Kern COG model, special speed/volume counts prepared by the City Engineer, or counts taken from the CalTrans Count Book. The volumes that are actual counts or were taken from the CalTrans Count Book are noted in Table 3-3. The current theoretical capacity, LOS "E," of the specific segment is given and was developed based on the geometrics of the facility in conjunction with the Florida Tables. The current level of service shown was developed from the traffic volume information, the geometrics and the Florida Tables.

The result of the existing level of service analysis shows that all of the major streets in the community are currently operating at LOS "C" or above. There is a significant factor of note with regard to the usage of the Kern COG projections to describe existing conditions. In at least several significant circumstances (Cecil, Girard and Garces which have new traffic counts), the Kern COG traffic model significantly under-projects traffic volumes on major roadways. Therefore the data in Table 3-3 should be used to illustrate the pattern of traffic in the community and these projections should not be construed as actual traffic volumes.

Table 3-3
EXISTING CIRCULATION SYSTEM

Street	Segment	Existing Facility	Geometrics Median	Facility Type	Existing Volume	Level of Service
Wasco-Pond Road	Cecil Ave to Garces Highway	2 lane	Undivided	Unclassified	N/A	
	Garces Highway to Pond	2 lane	Undivided	Unclassified	N/A	
	Pond Road to Peterson	2 lane	Undivided	Unclassified	N/A	
	Peterson to Elmo Highway	2 lane	Undivided	Unclassified	N/A	
Casey Avenue	County Line to Cecil	2 lane	Undivided	Unclassified	N/A	
Melcher Road	County Line to Cecil	2 lane	Undivided	Unclassified	550[E]	C[F]
	Cecil to Garces Highway	2 lane	Undivided	Unclassified	550[E]	C[F]
	Garces Highway to Hart	2 lane	Undivided	Unclassified	N/A	
Albany Street (Stradley)	County Line to Cecil	2 lane	Undivided	Arterial	350[E]	A
	Cecil to Garces Highway	2 lane	Undivided	Arterial	580[E]	A
	Garces Highway to Woollomes	2 lane	Undivided	Arterial	1,800[E]	A
	Woollomes to Hart	2 lane	Undivided	Arterial	N/A	
	Hart to Pond	2 lane	Undivided	Arterial	N/A	
Dover Place	Garces Highway to Woollomes	2 lane	Undivided	Collector	840	C[F]
Ellington Street (SR 155)	Cecil to 11th	2 lane	Undivided	Collector	3,300[E]	C[F]
	11th to Garces Highway	2 lane	Undivided	Collector	3,420[A]	C[F]
	Garces Highway to 1st	2 lane	Undivided	Collector	7,300[E]	C[F]
Garzoli Avenue	Woollomes to Hart	2 lane	Undivided	Collector	1,400[A]	C[F]
	Hart to Pond	2 lane	Undivided	Collector	N/A	
SR 99	Ave 16 to County Line Road	4 lane	Divided	Freeway	38,000[B]	C
	County Line Road to Cecil	4 lane	Divided	Freeway	38,000[B]	C
	Cecil to Garces Highway	4 lane	Divided	Freeway	33,500[B]	B
	Garces Highway to Woollomes	4 lane	Divided	Freeway	35,500[B]	C
	Woollomes to Pond	4 lane	Divided	Freeway	35,500[B]	C
Fremont Street	Cecil to 11th	2 lane	Undivided	Collector	3,500[E]	C[F]

Table 3-3
EXISTING CIRCULATION SYSTEM

Street	Segment	Existing Facility	Geometrics Median	Facility Type	Existing Volume	Level of Service
(SR 155)	11th to Garces Highway	2 lane	Undivided	Collector	2,450[C]	C[F]
	Garces Highway to First	2 lane	Undivided	Collector	1,550[C]	C[F]
High Street	County Line to Cecil	2 lane	Undivided	Arterial	12,200[C]	C
	Cecil to Garces Highway	2 lane	Undivided	Arterial	700[C]	B
	Garces Highway to Woollomes	2 lane	Undivided	Arterial	5,200[C]	B
Girard Street	County Line Road to High Street	2 lane	Undivided	Collector	9,300[C]	D
Lexington Street	Cecil to Garces Highway	2 lane	Undivided	Collector	4,900[C]	C[F]
	Garces Highway to Woollomes	4 lane	Undivided	Collector	4,600[C]	C[F]
Norwalk Street	County Line Road to Cecil	2 lane	Undivided	Collector	1,000[E]	C[F]
Randolph Street	County Line to Cecil	2 lane	Undivided W/ Left	Collector	1,200[E]	C[F]
	Cecil to Garces Highway	2 lane	Undivided W/ Left	Collector	3,400[C]	C[F]
	Garces Highway to Woollomes	2 lane	Undivided	Collector	1,120[C]	C[F]
Browning Road	County Line to Cecil	2 lane	Undivided	Arterial	1,800[A]	A
	Cecil to Garces Highway	2 lane	Undivided	Arterial	2,300[A]	A
	Garces Highway to Woollomes	2 lane	Undivided	Arterial	3,700[E]	B
Driver Road	County Line to Cecil	2 lane	Undivided	Unclassified	N/A	
	Cecil to Garces	2 lane	Undivided	Unclassified	N/A	
	Garces Highway to Woollomes	2 lane	Undivided	Unclassified	N/A	
	Woollomes to Pond	2 lane	Undivided	Unclassified	N/A	
Zachary Avenue	County Line to Cecil	2 lane	Undivided	Unclassified	N/A	
	Cecil to Garces Highway	2 lane	Undivided	Unclassified	N/A	
	Garces Highway to Woollomes	2 lane	Undivided	Unclassified	N/A	
	Woollomes to Pond	2 lane	Undivided	Unclassified	N/A	
County Line Road	Mettler to SR 99	2 lane	Undivided	Arterial	1,100[E]	A

Table 3-3
EXISTING CIRCULATION SYSTEM

Street	Segment	Existing Facility	Geometrics Median	Facility Type	Existing Volume	Level of Service
	SR 99 to Girard	2 lane	Undivided	Arterial	3,100[E]	B
	Girard to Browning	2 lane	Undivided W/Left	Arterial	2,600[E]	A
	Browning to Driver	2 lane	Undivided	Arterial	400[E]	A
	Driver to Zachary	2 lane	Undivided	Arterial	400[E]	A
20th Avenue	Girard Street to Browning Road	2 lane	Undivided	Collector	1,100[E]	C[F]
Cecil Avenue	Wasco-Pond to Casey	2 lane	Undivided	Arterial	N/A	
	Casey to Melcher	2 lane	Undivided	Arterial	N/A	
	Melcher to Albany	2 lane	Undivided.	Arterial	N/A	
	Albany to Lexington	4 lane	Undivided. W/Left	Arterial	15,700[C]	B
	Lexington to Browning	4 lane	Undivided	Arterial	8,700[C]	A
	Browning to Driver	2 lane	Undivided	Arterial	N/A	
	Driver to Zachary	2 lane	Undivided	Arterial	N/A	
11th Avenue	Albany to Lexington	2 lane	Undivided	Collector	2,900[E]	C[F]
	Lexington to Randolph	2 lane	Undivided	Collector	N/A	
9th Avenue	Albany to Lexington	2 lane	Undivided	Collector	630[A]	C[F]
	Lexington to Browning	2 lane	Undivided	Collector	2,600[E]	C[F]
Garces Highway	Wasco-Pond to Casey	2 lane	Undivided	Arterial	1,300[E]	A
	Casey to Melcher	2 lane	Undivided	Arterial	1,300[E]	A
	Melcher to Albany	2 lane	Undivided	Arterial	910[E]	A
	Albany to Lexington[D]	2 lane	Undivided	Arterial	10,800[B]	C
	Lexington to Browning[D]	2 lane	Undivided	Arterial	9,100[C]	C
	Browning to Driver	2 lane	Undivided	Arterial	2,300[B]	A
	Driver to Zachary	2 lane	Undivided	Arterial	1,500[B]	A
1st Avenue	Dover Place to Ellington	2 lane	Undivided	Collector	N/A	
	Fremont to High	4 lane	Undivided	Collector	N/A	

Table 3-3
EXISTING CIRCULATION SYSTEM

Street	Segment	Existing Facility	Geometrics Median	Facility Type	Existing Volume	Level of Service
Woollomes Ave	Albany to Lexington	2 lane	Undivided	Arterial	7,600[E]	B
	Randolph to Driver	2 lane	Undivided	Collector	630[E]	C[F]
	Driver to Zachary	2 lane	Undivided	Collector	N/A	
Pond Road	Wasco-Pond to Stradley	2 lane	Undivided	Unclassified	3,800[E]	C[F]
	Stradley to Lexington	2 lane	Undivided	Unclassified	4,000[E]	C[F]
	Lexington to Browning	2 lane	Undivided	Unclassified	1,800[E]	C[F]
	Browning to Driver	2 lane	Undivided	Unclassified	1,800[E]	C[F]
	Driver to Zachary	2 lane	Undivided	Unclassified	1,800[E]	C[F]
Peterson Road	Wasco-Pond to SR 99	2 lane	Undivided	Unclassified	N/A	
	SR 99 to Eastern Boundary	2 lane	Undivided	Unclassified	N/A	

Notes:

[A] 1997 City count
[B] 1995 CalTrans Count Book
[C] 1998 ATE count
[D] 1998 ATE count data not yet available for these locations
[E] Estimated from Kern COG 1997 Model data
[F] LOS "A" and "B" not achievable. See explanation under Plan Section 2, Existing Traffic Conditions.
[G] LOS "B" not achievable. See explanation under Plan Section 2, Existing Traffic Conditions.

Existing Classified System Pattern

The pattern and spacing of a community's street system are as important as the proper designation of the functional classification of the streets. Arterial streets located approximately every mile with collector streets located between the arterials at approximately half-mile intervals are ideal for communities like Delano that have developed their circulation system based on the automobile.

This pattern accomplishes several goals. It balances the system by providing for mobility with arterials, thus not committing the community to an over expenditure of resources. It provides for movement within an area with collectors at half-mile intervals. It protects neighborhoods from through traffic by isolating local streets and promoting through movements on collectors and arterials, which are designed to accommodate these trips. Finally, it complements the Land Use Element by providing locations along arterials and collectors for traffic generating activities. The following sections discuss the relationship of Delano's existing street pattern to the pattern described above.

Regional access to the Delano area is directly provided from SR 99, which runs through the downtown area. As previously identified, Albany Street, Browning Road, Cecil Avenue, Garces Highway (SR 155 east of SR 99), and SR 43 and 46 also provide regional access to the community. Roadways providing regional access to Delano are either two lane undivided facilities which are rural in nature or a four lane divided freeway.

One-mile spacing between the existing arterials is proving to be ideal for the type and intensity of development in the community. Typical of rural cities in the Central Valley, Delano's collector street system has not been fully developed. Overall, collector streets in Delano generally balance their mobility and access functions adequately. In the core area of town, the collectors are through streets such as 9th Avenue and 11th Avenue, which run through the central business district.

Connectivity

The success of a community's street system is greatly affected by the concept of connectivity. Connectivity describes the continuity of a street system. Typically, street systems develop over a long period of time and can develop missing links in the network. These missing links can create both local and community wide problems as the traffic that would logically use the missing link must use another street to complete a trip. Delano's street system has developed with some connectivity problems, which center around the Union Pacific Railroad. The railroad bisects several streets between Cecil Avenue and Garces Highway in the downtown area. The streets not providing connectivity due to the railroad are 6th, 7th, 8th\, 9th, 10th, 12th and 14th Avenues.

Other than these downtown streets, Delano has developed its existing street system with excellent connectivity. Most of the arterials are continuous within the community and the expansion of these facilities to provide for future development can be accommodated.

Truck Routes

The City of Delano does not have any designated truck routes within the City. At this time, trucks are allowed on all street segments within the City. A truck parking ordinance is in effect which generally identifies restricted overnight truck parking areas.

According to City staff, most of the trucking activity occurs at the east end of the City. Browning and Randolph Avenues have an abundance of heavy truck traffic from the outlying County areas. In addition, the SR 99/Woollomes off ramp has a high level of truck activity.

Transportation System Management

Transportation System Management (TSM) is defined as the use of various traffic and demand management strategies to maximize the use and capacity of the existing transportation system. The goal of transportation management is to use low cost solutions to congestion problems delaying the need for large capital outlays. As traffic and parking demand continues to increase in Delano, TSM strategies can be used to assist in mitigating the associated problems. Traditional transportation system management strategies include, but are not limited to:

- the timing of traffic signals to more efficiently respond to traffic demand;
- the striping of existing streets to include exclusive turn lanes or additional through lanes to maximize the carrying capacity of the street;
- the use of flexible work schedules to shift or lengthen the peak hour of travel;
- development of carpools and ridesharing programs to increase the number of people per vehicle; and
- the use of public and private transit to reduce the number of vehicles using the streets during the peak hour.

Goods Movement

The movement of goods and services is a primary function of any circulation system. The movement of goods and services includes those into, through, and within the community. Delano is home to DLS, the western hub of distribution for Sears. Currently, the primary goods and services moved in Delano are related to the agriculture industry. Delano is one of the country's primary producers of kiwi fruit, table grapes, and a variety of other fruit crops. In addition to agriculture, light and heavy industries are located in Delano and the surrounding County areas. Some of the major employers in the Delano area that would require goods movement include:

Business Name	Number of Employees
Pandol & Sons	1,500
North Kern State Prison	1,240
V.B. Zaninovich & Sons	1,000
Pavich & Sons	700
Superior Farming Co.	700
Anton Caratan & Sons	650
M. Caratan & Sons	650
Castle & Cooke	600
Delano Regional Medical Center	505
Lucich Farms	500
Skyline Ducor Ranch	500
Marco B. Zaninovich	500
Dan Tudor & Sons	500
Jasmine Vineyards	450
Delano Logistics Services	550
A. & N. Zaninovich	400
Paramount Citrus	300

Source: Delano Economic Development Department

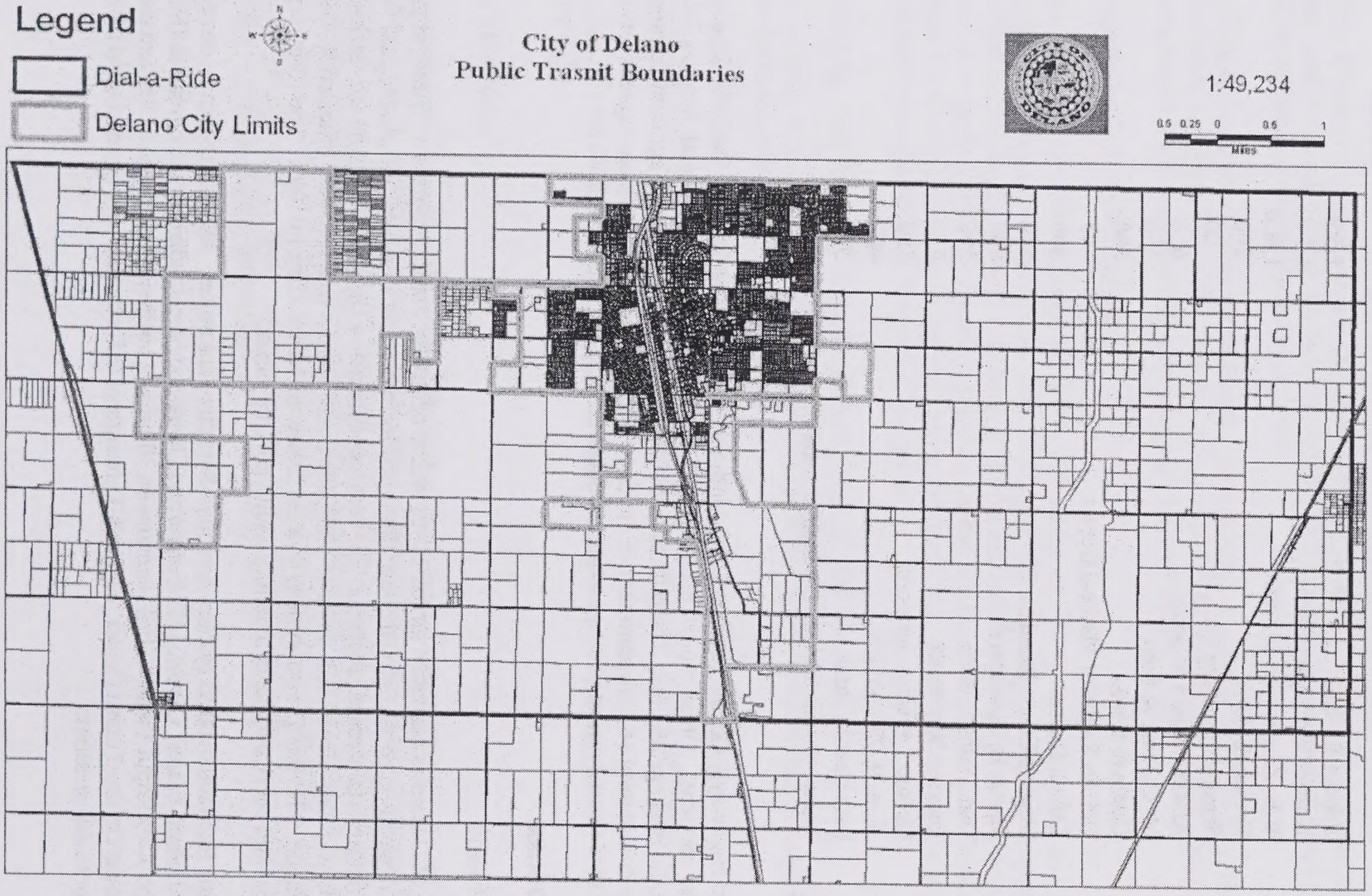
The State Highways, County roads and City arterial streets are the primary facilities for moving goods and services. Other modes providing for the movement of goods and services include railroads and package express. The railroad provides for limited shipment of agricultural products out of the community and the shipment of goods into the community. Package express service is provided to Delano by most package express companies and the U.S. Post Office.

3.4.4 Transit

Public Transit

The City of Delano is currently served by a number of public transit programs. These programs include a demand-response, a fixed route, County of Kern service, a medical van shuttle, and Social Service Transportation transit programs. The demand-response or Dial-a-Ride (DAR) service has been operated by the City since 1988. Prior to 1988, the DAR service was privately operated by Gilbert Transportation. The fixed route system was implemented by the City in 1995. The City's transit system provides service to the community within the City limits.

The existing fixed route transit system currently offers three bus routes. All routes begin at one central point, the Delano Transit Center, 11th Avenue and Glenwood Street, adjacent to downtown Delano. The Delano Area Rapid Transit (DET) operates on 30-minute headways, with the starting and ending location at the Delano Transit Center. Figure 3-3 illustrates DET's current service area boundaries and existing route designations.


Legend
Dial-a-Ride
Delano City Limits
City of Delano
Public Trasnit Boundaries
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0.5 0.25 0 0.5 1
MILES

The DET operates on a seven day service schedule. Service hours are as follows: Monday through Friday from the hours of 7:00AM to 6:00PM, and Saturday and Sunday from 9:00 AM to 5:00 PM. One-way fares for the fixed route service are 50 cents per person. Advance ticket purchases are available for a reduced fare. Delano Express Transit services the local shopping, business areas, medical centers and schools.

The Delano Dial-A-Ride (DAR) service is based on a first come-first serve basis. Clients call the transit center to schedule a pick up.

Overall, combined ridership for the Delano Express Transit and DAR service totaled 239,145 passengers during Fiscal Year 1996/1997. Of this total, the fixed route carried approximately 156,000 riders, the demand response carried an estimated 30,000 riders, and the remaining 30,000 riders were comprised of County and Social Services passenger trips. Annual operating costs for Fiscal Year 1997/1998 were $682,944. Delano Transit fares totaled approximately $113,000 and the remaining revenue of $530,624 came from a combination of state and federal transportation funding sources. These funding sources include Transportation Development Act (TDA) funds, Federal Transit Administration (FTA), Section 5311(f) Grants (formerly known as Section 18), and other state and federal funding.

Kern County Transit Service

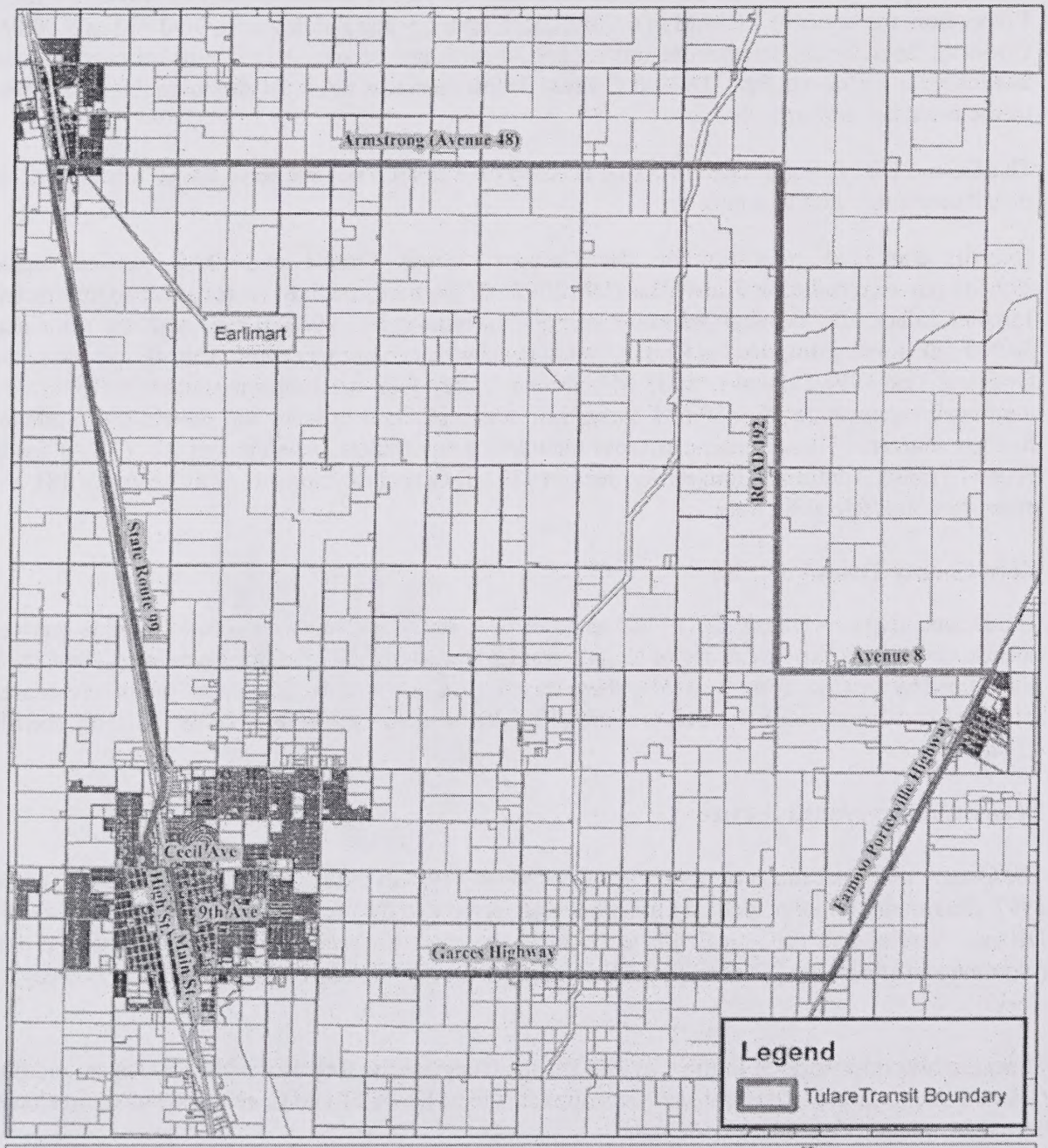
The Delano Express Transit (DET) has an agreement with the County of Kern to provide services outside the Delano City boundary to County residents who live within the service area. The City is reimbursed by the County for providing these services to County areas. The Kern County service area is bounded by County Line Road on the north, Kyte Road on the east, Pond Road on the south, and SR 43 on the west.

Tulare County Transit Service

The County of Tulare has recently revised their routing system in the Delano region. As of August 1997, the County implemented additional routing services to the areas of Earlimart, Richgrove, and Delano. Service to these areas will be available five days a week, with two service times a day (morning and afternoon). Currently, the Earlimart, Richgrove, Delano route operates only two days a week.

There are two stops located in the City of Delano. They are the Regional Medical Center, and the Delano Ranch Market. Recently, service stops at the local KMART and Greyhound bus station have been discontinued due to lack of demand.

The cost to ride the Tulare Transit system is $1.50 per person, per trip. Tokens are available for seniors, free of charge. Children six years of age and under ride free of charge with an accompanying adult. Figure 3-4 displays the County of Tulare's transit service area boundary.



Tulare County
Transit Service Area Boundary
City of Delano

Fig. 3-4

Private Transportation

Regional transportation service in the Central Valley is provided by Greyhound. Greyhound provides access to Bakersfield and Southern California to the South and Fresno, Sacramento, and the Bay Area to the North. Greyhound is the only private transportation organization that services the City of Delano. The Greyhound station is located at High Street and 11th Avenue in central Delano. Greyhound provides services through Delano two times a day.

Social Service

The City also offers a "meals-on-wheels" program, which provides food to qualifying senior citizens, as part of the State of California Nutrition Program.

Taxi Service

Currently, there are no private taxi companies operating in Delano. The City operates a Dial-A-Ride system that works on a reservation basis. However, persons needing a ride may not always be able to reserve the Dial-A-Ride vehicle when it is convenient for them due to previously made reservations. Therefore, a taxi company may fill the gap in the demand responsive transit system that currently exists.

3.4.5 Aviation

History/Ownership

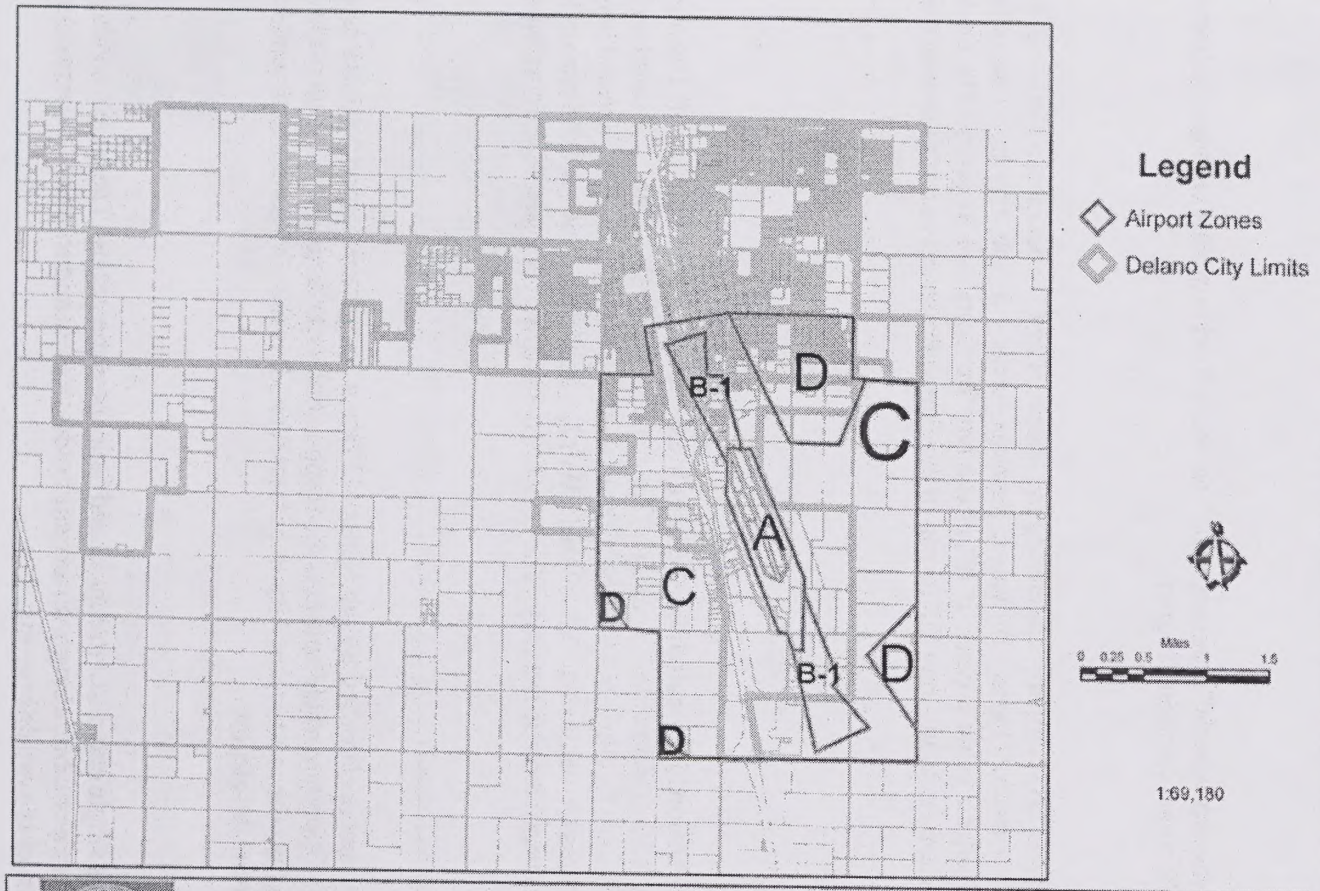
The Delano Municipal Airport is located in the southeast portion of the City of Delano, approximately two miles from the downtown center. The airfield was built in the 1930s and was originally operated as a County facility. In 1941 the airfield was used as an active air base and was operated by the United States Government. After World War II, the County operated the site until 1972 when the airport was transferred to the City. The City has owned and operated the airport from 1972 to the present day.

Airport Classification

The Delano Municipal Airport is classified by the National Plan of Integrated Airport Systems as a General Utility - 1 facility. Operation of the airport is the responsibility of the airport manager, a City employee. Figure 3-5 displays the most recent Airport Master Plan. It is the City's intent to maintain an up-to-date Master Plan for the airport.

Existing Facilities

The airport currently houses single engine, twin engine, and helicopter operations. There are a number of public and private hangers available, along with aircraft tie-down pads and shelters. Twenty-four hour self-service aviation fuel is available on-site.



Airport Zones
City of Delano

Fig.3-5

There is currently one runway in operation. The main runway is approximately 5,560 feet long and 50 feet wide. A second restricted runway is in need of deferred maintenance and repairs and may be shut down in the near future. The airport is equipped with AWDS III navigation and lighting facilities and is open twenty-four hours a day. The airport currently operates on a non-precision instrument approach method.

The City has an existing 1,500 square foot terminal building, which is located at the airport. The building consists of a small office, pilot lounge, and waiting area. The airport also has a restaurant on-site.

In the past two years, the airport has undergone a variety of new construction projects as part of a runway overlay program, which has allowed for better service. These projects totaled an estimated $300,000 and included repair of existing ramps and other facilities, and the installation of reflectors on taxiway lights.

The City is seeking Federal Aviation Administration (FAA) funding as part of the Airport Improvement Program (AIP). The City has applied for $400,000 of grant funds for airport improvements. The City desires to make improvements associated with updating the runway, such as runway paving, implementation of a rotating beacon, and the installation of a new lighting system.

Based on future demand for aircraft services, the airport does have space available for expansion of the existing airport operation. There are currently sixty ramp parking spaces available at the airport.

Existing Operations

Recently, there has been a decrease in crop dusting activity at the airport. The airport currently houses the planes utilized for agricultural spraying. Mixing of the chemicals associated with said agricultural spraying operation is now accomplished in the field, instead of on-site at the airport. One of the reasons the airport has been able to support the existing aircraft stock is their competitive fuel prices. The airport has shown an increase in itinerant business through the round-the-clock automated fueling system. The airport does not currently offer air cargo services and has no plans to implement an air cargo service within the next five years.

There are currently two fixed base operators located at the airport. These operations include private maintenance/repair and helicopter services. The City plans to construct a maintenance and repair facility at the airport when funding is available.

Commercial Passenger Service

There is no commercial air service operating to and from Delano Municipal Airport. The closest service is available at Meadows Field in Bakersfield, approximately 30 miles south of the City. Meadows Field is operated by Kern County Airport, where Commercial service is provided. These commuter airline shuttles provide linkages to the large urban areas of Southern California and the Bay Area.

The Delano Municipal Airport has no plans to implement a commercial passenger service within the next five years.

Airport Master Plan

In 1992, the City of Delano adopted an update to the Airport Master Plan. The Plan states that the general objective of the Airport Master Plan is to "prepare a long-range plan to guide development in order to maintain the airport as a valued transportation facility for both Delano and those parts of the surrounding area for which the Airport is the most convenient aviation facility." Some of the principal findings from the Plan are outlined as follows:

The City of Delano serves as an important economic center for Northern Kern County and Southern Tulare County, providing major commercial and health care services for the surrounding communities of Earlimart, Richgrove, McFarland, Wasco, Pond, Alpaugh and Pixley. Other major industries are retail trade, professional services, and manufacturing, while agricultural employment accounts for over one-third of the employment in Delano.

Population growth through the planning period is based on the City's continuing economic development marketing efforts and the impact of the new State Prison and the Return-to-Custody facility. This new population segment will necessitate a substantial work force, as well as the creation of ancillary businesses and industries. Additional population and employment opportunities are anticipated by the relocation of businesses to the area.

The number of based aircraft at Delano Municipal Airport is forecast to increase from 49 in 1990 to 80 in 2010, with a larger percentage increase in multi-engine aircraft and helicopters than in single-engine aircraft.

The number of annual aircraft operations at Delano Municipal Airport is forecast to gradually increase over the planning period from 12,500 in 1990 to 38,000 by 2010. As airport operations expand and the role of the airport evolves, the City will undertake updates of the Airport Master Plan to ensure that it is up-to-date.

3.4.6 Rail

Existing Rail Service

Delano is currently served by the main line of Union Pacific Railroad, formerly the Southern Pacific Railroad. The railroad runs essentially in a north-south direction, parallel to SR 99. There are currently seven railroad crossings within the City as follows: Woollomes Avenue, First Avenue, Garces Highway, 11th Avenue, 13th Avenue, Cecil Avenue, and County Line Road. It should be noted that the rail line is situated adjacent to the City's South Delano Industrial Park Area, allowing for easy rail access to industrial sites. No changes have been made to the existing rail line since the 1982 Circulation Element. Additionally, there are no abandoned rail lines in the community.

The Union Pacific Railroad is the main freight train service in the Central Valley. Due to the vast

agricultural production in the region, the railroad is an essential transportation shipping mode. Furthermore, cold storage facilities are located along the line allowing for quick service of local agricultural commodities.

As mentioned above, there are a number of existing railroad crossings scattered throughout the City limits. At certain times of the day, when a train is moving through the City, there are temporary traffic congestion problems. The City is currently considering the construction of a grade separation at either Cecil Avenue or Garces Highway to reduce traffic congestion when trains are present.

Passenger Rail Service

Delano is not currently served by AMTRAK passenger service. The closest station is in Wasco, approximately 15 miles southeast of the City. Other AMTRAK stations are located in the nearby communities of Corcoran and Bakersfield.

3.4.7 Bicycle and Pedestrian

Currently, the City of Delano does not have designated bicycle routes. Most of the bicycle activity in Delano occurs around the schools by school children. Delano has one high school, one junior high school, one middle school, and six elementary schools. A Draft Bicycle Plan was prepared for the City in 1980, but has never been formally adopted. Approximately 12 miles of City streets were proposed to be designated for bicycle use. Randolph Street, Eleventh Avenue, Lexington Street, and Norwalk Street are all designated for bicycle use along with other local community streets. Due to high volumes of traffic on the City's arterial streets, bicycle travel is discouraged on these streets. Updating and adopting the bicycle master plan is needed.

Pedestrian facilities in Delano are limited to sidewalks, crosswalks, and pedestrian crossing lights. These facilities are located to varying degrees throughout the community. Curb cuts and ramps are being required on any new construction in the City.

3.4.8 Parking

There are six city off-street parking lots in the downtown area of the City of Delano, as well as various striped and unstriped on-street parking. Figure 3-6 illustrates the location of the City's off-street parking lots. Existing parking in the downtown area is sufficient to serve the current parking demand. Most of the available parking lots have minimal use during the day. Furthermore, some of the lots remain empty. It appears that adequate on-street, diagonal parking and associated business parking areas are currently meeting the parking needs of the community.

3.4.9 Circulation Issues

This section focuses on current issues affecting the circulation system in the Delano area, and those issues that will have an effect on the system in the future. Understanding how the circulation system works today will help determine how the system will work in the future, and assist the Community in anticipating future issues that will affect the transportation network.

Downtown Off-Street Parking
City of Delano

Fig. 3-6

Issues are covered by area of concern; streets and highways, transit, aviation, rail, bicycle/pedestrian, trucks, and goods movement. In addition, issues affecting the system are discussed in a State context, regional context and from a local perspective. A final section on opportunities and constraints of the 1982 General Plan is also included.

Statewide Issues

Growth will continue to be one of the biggest issues facing the citizens of California for the next two decades. The ability to accommodate population growth will be a major challenge facing the State in the years to come. The San Joaquin Valley is faced with an even greater challenge than the rest of the State. By the year 2040, the valley floor will increase by 9.48 million persons. Kern County alone is expected to increase by approximately 2.1% annually through 2020 and reach a population of approximately 1,220,300. Projections for population growth for the Valley are higher than that of the State as a whole. The issues of growth, coupled with diminishing resources at all levels of government, will adversely impact City budgets, requiring them to be particularly prudent in the administration of services.

Air quality is also a major question that is facing California. Areas such as the San Joaquin Valley are experiencing serious air quality problems. In the Valley the sources of this air pollution are wide ranging. Pollution sources include the San Francisco Bay Area (which is responsible for up to 40% of the pollution in the Valley), the Kern County oil industry, and mobile sources (interstate trucks and the automobile). The Circulation Element is designed to have a positive effect on air quality by creating a street network that will improve the operating efficiencies of the Community's street system. This is accomplished by decreasing vehicle delays, travel times and engine idling time, all of which contribute to vehicular emissions. The more efficient the Delano circulation system becomes, fewer delays will occur and less fuel will be consumed. The Circulation Element can also contribute to improved air quality by laying a framework for the development of a balanced transportation system. The Circulation Element can ensure that resources are balanced to match the Community's needs by encouraging the use of all modes for the most efficient transportation of people, goods, and services.

Regional Issues

Regional issues are becoming more influential on their impact on the local circulation system. Several issues bear notice as they relate to the future Circulation Element. These regional issues will have a more dramatic effect on the development of the local circulation system.

Since SR 99 runs through the City of Delano, regional access to and from Delano is not an issue. However, the off- and on-ramps to/from SR 99 are inadequate in several locations. Once the inadequate ramp situation is addressed and corrected, SR 99 access will play a major factor in the future growth of the City.

Like the State as a whole, the issue of growth will be central to the future of Delano. The growth projections for the Community suggest that the valley-wide growth trend will affect Delano similarly. The future Circulation Element must provide for the corresponding increase in travel by providing a balanced transportation system.

The most critical issue may be the problem of air quality. This issue may have the greatest impact on the development of the Circulation Element, requiring a careful evaluation on how to accommodate the projected population growth with an adequate circulation system. Much of the Valley is considered a non-attainment area for ozone and particulates. Mobile source emissions (cars and trucks) contribute to both of these pollutants. The development of a system to effectively handle the increased number of trips is an issue for all communities in the Valley.

The emergence of regional public transit in Tulare County and City service to Kern County will have a great effect on the development of the local Delano Transit operations. The local system will be called upon to provide both local commuter and social service transportation, but in the future will be asked to play an expanding role in feeding ridership to the regional intercity service.

The issues associated with "jobs/housing balance" are emerging in the Central San Joaquin Valley. The relationship between the location where people live and where they work has long been an issue in the Bay Area and Southern California. Locally, the emergence of significant levels of commuters from Bakersfield suggests that the transportation system will be asked to accommodate future commuters with patterns historically seen in more urban areas of California. The relationship of the "jobs/housing balance" and the future demands for transportation is a critical item. A number of people live outside of the Delano area and commute into the City to work. Generally, these are professional people who live in larger cities and work in Delano. A number of professional medical employees live in Bakersfield and work in the Delano Regional Medical Center (DRMC) facility. The following chart summarizes commuter profile information for the City of Delano.

Delano Commuter Characteristics

	Time
Workers Per Vehicle	1.31 Workers
Median Travel Time	17.2 Minutes
Drive Alone Time	13.3 Minutes
Median 2-Person Carpool	19.2 Minutes
Median 3-Person Carpool	29.7 Minutes
Median 4+ Person Carpool	31.7 Minutes
Bus	22.5 Minutes
Bicycle/Pedestrian	9.1 Minutes
Taxicab, Motorcycle, Other	12.2 Minutes

Source: 1990 Census Transportation Planning Package

Local Issues

Coupled with the concept of growth in the Valley, the creation of jobs within the community is of critical importance. Equally important in the context of the Circulation Element is the location within the community of these new jobs. Currently, industrial development is taking place primarily in southeast parts of town. Housing developments are currently planned throughout the community. This

planned land use pattern will require residents and workers to use both north/south arterials for commuting trips to and from work. This represents a fairly balanced approach to the jobs/housing layout within the community.

The companion to the creation of jobs is the development of commercial growth. The level of retail activity will influence the development of the future street system and require care in the location of regional services. Commercial development exists mostly in the downtown area, which has placed traffic on Main, High, 9th Avenue, 11th Avenue, and a number of other streets in the area. Traffic could increase as growth and revitalization continues in these areas.

Street and Highway Issues

Several issues affecting the street and highway system have surfaced over the past 17 years since the 1982 Circulation Element was completed. Several of these items reflect the effects of outside changes, while several indicate the need to address changes within the Community.

In the past, the Union Pacific rail line greatly affected the development patterns for the streets in Delano. The layout of the downtown streets reflects the original layout of the rail line. Today the railroad affects the circulation system through traffic delays as the trains pass through the City. The railroad also impacts the circulation system by limiting the number and location of grade crossings within the Community. This places added emphasis on selected street crossings to handle all traffic wishing to cross the tracks.

The issue of the conversion of two lane streets to four lanes must be addressed in the future as traffic volumes increase. Currently, arterials are typically constructed on a 90' to 110' right-of-way with a 72' to 90' curb-to-curb design. When streets are converted to four lanes with left turn pockets, one design option is the removal of on-street parking. This will affect businesses, truck deliveries and future transit operations in commercial areas. In residential areas, some homes lose the on-street parking and are limited to on-site parking.

Increasing agricultural and other truck traffic along Browning Road and Randolph Avenue are impacting circulation in the region. These streets were originally designed as rural two lane roads and have now transitioned into use as urban two lane roads. These segments at the east end of town should be upgraded to urban standards in order to accommodate this increase in traffic and use.

In addition, the northbound interchange of SR 99 at Woollomes Avenue is inadequate for truck traffic. The current configuration of the off-ramp, in conjunction with the nearby Union Pacific Railroad Crossing, does not allow for proper truck storage areas or ample turn space. This interchange was developed as a rural interchange and should be upgraded to an urban interchange to accommodate truck traffic to the airport and associated areas within the community. Part of the reason for increased truck traffic on Browning and Randolph is due to the rerouting of traffic that would normally use the SR 99/Woollomes interchange. Due to an insufficient facility, the alternate route is chosen, thereby creating more traffic on the north/south City street system at the east end of the City. The existing interchange at County Line Road is also inadequate due to an undersized northbound hook ramp. Significant congestion results from northbound vehicles exiting the freeway and attempting to turn left onto Girard Street. The Garces Avenue and Cecil Avenue interchanges are also substandard in that

they are partial interchanges, relying on two sets of hook ramps to the north and south of Eleventh Avenue along both sides of the freeway.

The City is also concerned about existing freeway overcrossings, as well as the need for additional overcrossings. Many existing overcrossings are too narrow and do not provide adequate space for normal traffic flow. There is, however, little room for expansion of the overcrossings, and the City does not have the funds available to undertake a major project such as widening of the overcrossings. State funding is minimal, and the City has other immediate needs for street improvements in the City which take precedent.

The City of Delano has two fire stations within the City boundary. One is located west of SR 99 and one can be found east of SR 99. The potential exists for emergency access to be limited when a train is passing through the City.

The City of Delano's Regional Medical Center (DRMC) is located east of SR 99. DRMC serves as a full service hospital for the community and encompassing region. An additional concern is access to Interstate 5. No direct access in an emergency is available from Interstate 5 to the Delano Regional Medial Center.

Another concern in the Community is the operation of local streets as collectors. This is a common issue for communities the size of Delano. The designation of collectors well in advance of development is one method for eliminating the continuance of this confusion. By determining where and how the collectors will be developed, the street system can be designed to provide the proper balance between mobility and access.

The future street system can also be used to further strengthen the concepts of neighborhoods by physically defining the areas designated by the Land Use Element for growth. The relationship between the location of arterials and collectors and the planned residential neighborhoods can be used to define "neighborhoods." Areas formed by arterials can be used to define distinct sections of the Community.

In addition to the above listed issues, the City should implement certain policies to provide for an overall growth management plan for the City's street system. Some of the policies and goals related to this issue are detailed in Section 4 of this report.

The following areas within the City are known "hot spots" where traffic congestion is a problem from time to time:

- County Line Road at SR 99 intersection/ramps
- Girard at SR 99 ramps
- Cecil Avenue at SR 99/High Street/Union Pacific Railroad
- Cecil Avenue at Norwalk (Delano High School)
- County Line Road at Randolph Street
- High Street at 11th Avenue intersection
- Garces Highway from Clinton to Randolph Street

- Browning and Randolph (full length of City)
- Union Pacific Railroad Crossing between 11th Avenue and Garces
- Woollomes Avenue at SR 99 off-ramp
- Main and 11th Street

Transit Issues

The City of Delano currently owns and operates its own transit system. Delano Transit operates both a demand-response and fixed-route service within Delano's City limits. The City also provides service to the outlying Kern County areas. The County has a financial reimbursement arrangement for the City to offer this service. The Tulare County Transit offers a rural route service to the City of Delano. The routes operate daily and serve the communities of Earlimart, Richgrove and Delano.

The City is faced with the need for additional integration of transit systems to ensure adequate transportation services to the community and adjacent County areas. The Transit Development Plan Fiscal Year 1996/97 identifies the need for a downtown Transit Transfer Station, which should be located as close as possible to the current transit hub.

Based on the projected 4.2% growth expected for the City of Delano, the transit service must be able to expand their services to meet the needs of the population. Additional routes may need to be implemented as ridership increases, and different areas of the City develop.

Aviation Issues

The City of Delano has land available for expansion of its existing airport facilities. The annual operations at the airport are expected to steadily increase over the next two decades.
The primary focus for the airport will be the upgrading and improvements to existing facilities currently at the airport. Based on FAA funding approval and allocation, the airport may undergo a large-scale rehabilitation of current facilities over the next few years.

Due to the strategic location of the airport at the southeast corner of the City, and the restricted non-airport use type of development, there are no noise, safety, or land use concerns related to the airport at this time. However; the airport should be protected from future encroachment by incompatible noise sensitive land uses or land uses involving large assembly of persons, especially in the approach zones.

Rail Issues

The long-term health of the rail industry continues to be affected by competition from trucking. The rail industry is restructuring its organizations to become more competitive. The merger of Union Pacific Railroad with Southern Pacific Railroad represents one restructuring example. Because underlying economic demands are facing the Union Pacific Railroad, care must be exercised in circulation and land use decisions that might affect current and potential rail shippers. The loss of the rail shipment option would place additional demands on the street network as existing and future businesses would be limited to only truck shipments.

The continuing development of industrial uses in southeast Delano could increase the demand for rail

service along the Union Pacific line. This increase in rail service will strengthen rail freight service to and from the community. The need to strengthen the number and volume of shippers along both rail lines is important to the long term economic health of the Union Pacific Railroad. Traffic studies have also identified the need for railroad grade separations at Garces Highway, 11th Avenue, and/or Cecil Avenue.

Bicycle and Pedestrian Issues

A lack of a comprehensive bicycle plan is typical of a community the size of Delano. As Delano has grown, the need for formal bicycle routes has arisen. Although bicycle traffic comprises a small percentage of the overall traffic in the City, it is anticipated that bicycle travel will grow as population and employment increase in Delano. Bicycle routes could encourage people to use this alternative form of transportation and provide recreation for citizens in the Community.

Some areas in Delano lack adequate pedestrian facilities. There are numerous curb returns in the older sections of the City that are not handicapped curb returns. In addition, sidewalks are missing in some areas and sidewalk replacement is needed in other areas.

Truck Route Issues

Trucking will continue to be the major mode for the movement of goods into and out of Delano. With the continued urbanization of the area, the shipment of agricultural products will be augmented by the ever increasing amounts of consumer goods. Major employers in the Delano area are located throughout the community and not concentrated in a specific area. However, increased trucking activity near the airport's industrial area will continue to impact the existing roadway system.

Transportation System Management Issues

The use of transportation system management strategies is becoming more applicable in the cities in the Central Valley. As cities continue to grow, the development of a wide range of strategies will be seen. These strategies can be used not only to relieve congestion, but can be expected to assist in the improvement of mobile source emissions. The application of existing strategies and the innovation of new strategies will continue over the years to come. These management techniques will be essential to facilitate continued development in the region. The implementation of new strategies, including the use of lane restriping and traffic signal timing changes, would enhance the existing transportation system management strategies already in place. Furthermore, the City has provided adequate parking facilities in the downtown area not only for existing demand, but also to accommodate future expansion and growth.

Goods Movement Issues

The efficient movement of goods and services will continue to be a primary issue for the circulation system. As Delano's population grows, delivery truck traffic can be expected to increase, which will place an added burden on the community's system. The location of major distribution or manufacturing plants in the community will increase the regional and statewide shipping of goods into

and out of the area. The Delano Municipal Airport and the Union Pacific Railroad also provide a transportation source for movement of goods throughout the region, state, and nation. The City will most likely experience an increase in airplane and rail activity commensurate with growth and expansion of the community.

3.5 CIRCULATION POLICIES

ESTABLISH A SAFE AND EFFICIENT TRANSPORTATION SYSTEM THAT PROVIDES ADEQUATE ACCESS THROUGHOUT THE CITY

Objectives

A. Achieve and maintain Level of Service "C" all intersection throughout the City, with the exception of freeway interchanges and high volume intersections where the City's objective is to achieve and maintain Level of Service "D".

ROADWAY CLASSIFICATION, STANDARDS

Objectives

A. Develop a circulation network of local roads, collectors, arterials and major arterials that will meet projected traffic needs.

Policies, Standards

1. All street and roadway improvements shall be consistent with the Circulation Element of the General Plan.

2. The Circulation Element shall determine the function of major streets. The City's functional street classification system shall include major arterials, arterials, collectors, minor collectors and local streets.

3. Designate streets according to the following functional classifications:

    a. Arterials serve as the principal network for cross-town traffic flow. They connect areas of major traffic generation within the urban areas and connect with important county roads and state highways. They also provide for the distribution and collection of through traffic to and from collector and local streets serving residential, commercial, and industrial areas.

    b. Collector streets provide for traffic movement between arterial and local streets, traffic movement within and between neighborhoods and major activity centers, and limited direct access to abutting properties.

c. Local streets provide for direct access to abutting properties and for very localized traffic movements within residential, commercial and industrial areas.

4. Apply consistent standards for new street development, based on traffic carrying capacity and classification.

5. Work with Caltrans to eliminate the existing hook ramps between Garces and Cecil, replacing them with "slip ramps onto one-way frontage roads along either side of the freeway. Modify the existing frontage roads along State Route 99 to function as one-way streets between Garces and Cecil.

6. Arterial, collector and local street standards shall be developed which provide adequate capacity for their appropriate function, and these shall be incorporated into the Subdivision Standards for the City of Delano.

7. Actual design and improvement to ultimate standards shall be achieved through inclusion of facilities as part of the City-wide Capital Improvements Program, or by new developers as areas adjoining the designated circulation system are developed, with allowance for bicycle lanes, in locations adopted by the City Council.

8. The design of arterials, collectors, local collectors, and local streets shall comply with the Subdivision Standards for the City of Delano, as amended.

9. Standards for new street development can be altered or refined through the specific plan or planned unit development process when it can be demonstrated that projected traffic flows can be accommodated.

10. New street developments in areas of urban expansion should not be limited to a "grid system." More efficient and varied street layouts should be encouraged, wherever possible.

11. New arterial and collector streets shall be designed to operate at Level of Service "C" level or better for a period of at least 20 years following their construction, wherever feasible. Freeway interchanges and high volume intersections where it is not feasible to achieve and maintain LOS "C" shall be designed to achieve and maintain LOS "D" for a period of at least 20 years following their construction,.

12. The right-of-way widths and construction widths of all classes of streets from local to arterial shall be updated as necessary to reflect the street classifications in the Circulation Element.

13. Right-of-way essential to the circulation system should be dedicated and/or developed to the appropriate extent and width when a zone change to a greater density, division of property or development occurs.

14. City circulation system street alignments shall be coordinated with the County of Kern and County of Tulare circulation system street alignments.

15. Work with Kern and Tulare counties should incorporate Delano's Circulation Element into their Countywide General Plans.

16. All land development proposals shall be reviewed to assure consistency with this Circulation Element.

Arterials

17. The following streets are proposed to be arterial streets within Delano's urban area:

East-West Arterials	North-South Arterials
County Line Road	Wasco-Pond Road
Cecil Avenue	Casey Avenue
Garces Highway (SR 155 E of SR 99)	Melcher Road
Woollomes Avenue	Albany Street/Stradley Avenue
Schuster Road	Garzoli Avenue
Pond Road	High Street
	Browning Road

These major arterials shall be developed with a minimum right-of-way of 110 feet, to include four travel lanes, parking, and a two-way left center turn lane or median. Where the Public Works director determines that a 110-foot right-of-way is not required to meet applicable level of service standards, arterials may be developed within a 90-foot right-of-way, eliminating either the center median or on-street parking, as determined appropriate by the Public Works Director.

18. The primary purpose of arterials is to carry traffic. Parking should be discouraged on such streets and eliminated where it now exists, along existing arterials as traffic safety conditions warrant.

19. Arterials shall be built in areas where traffic demand warrants the development of this facility to meet the adopted level of service standard.

20. Arterial streets shall be built at a typical separation of one mile.

Collectors

21. The following streets are proposed to be collectors within Delano's Urban Area:

East-West Collectors	North-South Collectors
20th Avenue	Mettler Avenue
11th Avenue	Hiett Avenue
9th Avenue	Ellington Street (Portion of SR 155)
"Future Street" between Garces and Woollomes	Fremont Street (Portion of SR 155)
18th Avenue	Princeton Street
	Lexington Street
	Norwalk Street
	Randolph Street/Mast Avenue

22. Collectors are designed to have an 80-foot right-of-way width which allows four lanes undivided with parking, or two lanes with a two-way left turn center lane. Minor collectors may be developed with a 60-foot right-of-way to include two travel lanes, and parking.

23. Collector streets shall be at approximately one-mile intervals centered between arterial streets and shall be planned to intersect with other streets so as to maximize traffic safety and discourage fast flowing traffic through residential areas.

24. Major arterials, arterials, and collectors shall form 4-leg, right angle intersections. Offset or skewed intersections of streets shall be avoided where possible.

Local Streets

25. Local street right-of-way shall be a minimum of 50 feet which allows two travel lanes and parking.

26. Local streets shall serve residential neighborhoods, and shall not be used to carry through traffic or high traffic volumes.

27. Local streets shall not carry an unreasonable level of through traffic. Should it be determined that a local street is carrying an unacceptable level of through traffic, the City may use appropriate means to reduce traffic through creation of one-way traffic flow, upgrade the street to collector status, installation of traffic diversion devices, and/or any other means deemed to be acceptable under the Vehicle Code of the State of California.

28. Permit design standards for local streets to reduce right-of-way width and paving where innovative approaches to street design are proposed within a planned unit development.

Median Breaks/Driveway Standards

29. Median breaks and driveway standards for arterial, collector and local streets directly affect the performance of these roadways, and the following minimum standards have been developed to facilitate the proper operation of these roadways:

Arterial Street Standards

30. Driveway access to major activity centers should be provided with adequate separation from the adjacent intersection of a collector or arterial street, measured from the curb return to the nearest edge of the driveway. If driveways must be provided near intersections for facilities (such as service stations) these driveways shall not be serviced by median breaks .

31. Adequate separation shall be maintained between driveways along commercially developed arterials. Where minimum spacing pursuant to City standards is not practical, the development shall provide acceptable traffic mitigation measures in addition to those already required.

32. Where practical and desirable, driveways should be located on adjacent collector streets rather than on arterial streets.

33. Driveway consolidation shall be encouraged through joint access agreements along arterials.

34. Full median breaks, where there is no adopted design, should provide access to collector streets and to major activity centers and should be provided with adequate separation.

Collector Street Standards

35. Adequate separation of driveway access to major activity centers should be maintained. If driveways must be provided near intersections for facilities (such as service stations) these driveways shall not be serviced by median breaks.

36. Adequate spacing between driveways and intersecting local streets should be maintained from the curb return to the nearest edge of the driveway. Where spacing pursuant to City standards is not practical, the development shall provide acceptable traffic mitigation measures in addition to those already required.

37. Driveways to residential property along collectors should be consolidated whenever possible.

38. Medians on collectors shall be provided by concrete where left turn control is needed and by painted medians on two-way left turn pockets where appropriate. Where concrete medians are provided, median breaks should be adequately spaced.

GOODS MOVEMENT

Objectives

A. Provide for the safe transport and delivery of goods in and out of the City.

Policies, Standards

1. Truck routes to efficiently move heavy traffic through the City shall be designated and maintained.

2. Route heavy traffic to designated arterial and collector streets only and away from local residential streets.

3. Provide adequate access to busy destination points such as shopping centers, recreational sites, and employment centers.

Objectives

B. Assure the continuation of railroad freight service to the City of Delano.

Policies, Standards

1. Pursue expansion of industrial facilities that will use railroad freight services.

2. Support and participate in Kern COG rail transportation activities.

SAFETY STANDARDS

Objectives

A. Maintain safe and efficient circulation routes for safety and emergency purposes.

Policies & Standards

1. Establish adequate plans to insure effective police and fire protection to all parts of the City.

2. The street network shall provide a quick and efficient route for emergency vehicles, including police, fire and other vehicles, when responding to calls for service. The length of single-entry access routes shall be restricted to one quarter mile or less.

3. Designate SR 99, SR 155, Cecil Avenue, Garces Highway, Albany Street, Browning Road, Lexington Street, and County Line Road as vehicular evacuation routes out of the City.

4. Coordinate the City's evacuation routes with state and county government plans.

Objectives

B. Promote traffic safety throughout the City by enforcement of speed limits, installation of appropriate traffic control devices, and construction of pedestrian facilities.

Policies, Standards

1. Minimize hazardous encounters among all transportation modes by utilizing special safety techniques and precautions at intersecting points.

2. Prepare and maintain a comprehensive circulation plan to insure traffic safety and travel efficiency.

3. Encourage bicycle routes along less intensive vehicular paths.

4. Provide programs that will educate the public on bicycle, pedestrian, and vehicular safety.

5. Carefully design ingress and egress to shopping centers and employment centers to minimize traffic hazards.

6. In order to promote safe and efficient traffic flow throughout the City, traffic signals shall be spaced no closer than 1/4 mile on arterials except in unusual circumstances. The intersections of arterial and collector streets and the access driveways to major traffic generators shall be located so as to maintain this minimum spacing.

Objectives

C. Maximize the use of site planning techniques to improve traffic safety.

Policies, Standards

1. Direct access to collector streets from residential lots is prohibited except where physical circumstances do not allow other design solutions.

2. Left hand-turn lanes shall be provided where necessary for access from arterials into high traffic commercial or multi-family developments.

3. Project streets shall be designed in a manner that reduces through traffic on local streets and reduces the number of intersections with collectors and arterials.

4. New subdivisions shall contain non-continuous street patterns for interior local streets to protect neighborhoods from the intrusion of through traffic from collectors and arterial streets.

5. Residential subdivisions shall be designed to encourage access from collector streets.

6. Promote design standards that allow for safe and efficient transport, delivery, loading and unloading of goods from service vehicles within commercial and industrial areas.

7. Where major new activity centers are proposed along arterial streets, designs shall be encouraged which minimize construction along the property line or along the adopted set-back line, whichever is appropriate.

8. Developers shall mitigate traffic impacts associated with their projects.

9. The City shall promote an active policy of consolidating driveways, access points and curb cuts along existing major arterials, or arterials when development or change in intensity of development or land use occurs or when traffic operation or safety warrants.

10. Where arterials and collector streets are required, residential development shall be oriented away (side-on or rear-on) from such streets, and properly buffered so that the traffic carrying capacity on the street will be preserved and the residential environment protected from the adverse characteristics of the street.

11. Due to the traffic congestion which results from numerous points of ingress and egress along commercial streets, future commercial developments or modifications to existing developments shall be master planned with limited points of ingress and egress onto a major street. Ingress and egress to shopping centers should be carefully designed in order to promote traffic safety. Left-hand movements into and out of commercial areas should be minimized and existing points of ingress and egress shall be consolidated whenever possible.

12. Maintain an up-to-date airport master plan for the Delano Airport.

Objectives

D. Upgrade and maintain existing transportation corridors to meet urban safety standards.

Policies, Standards

1. Encourage the development of improved signalization and intersection design.

2. Utilize traffic control devices such as center medians and/or left turn pockets where appropriate.

3. Provide adequate street lighting and traffic control devices throughout the City to ensure safe and efficient mobility.

TRANSPORTATION SYSTEMS AND CONGESTION MANAGEMENT

Objectives

A. Maximize the efficiency of the existing street system.

Policies, Standards

1. The City encourages the use of energy efficient and non-polluting modes of transportation.

2. Transportation System Management and Transportation Demand Management are the preferred strategies for the mitigation of traffic and parking congestion. Public transit, traffic management, ridesharing and parking management are to be used to the greatest extent practical to implement transportation management strategies.

3. Promote the long term shifting of peak hour commute trips from the single occupant automobile to ridesharing, buses, pedestrian, and bicycles.

4. Large development shall be encouraged to incorporate transit passenger facilities, bicycle racks or lockers, shower facilities, as well as on site services (eating, mail, banking, etc.) as ways to encourage alternative modes for commute trips.

5. Delano shall participate in a joint SR 99 Corridor Study along with CalTrans and Kern COG to determine the best solutions and funding options for the needed segment, overpass, and interchange improvements. This study will encompass ramp intersections as well. The solutions to the segment, overpass, interchange and ramp intersection problems will result in an operating level of service of "C". Until this study is completed, the City of Delano will require traffic impact studies as part of the environmental review for all development proposals within one half mile of SH 99 that exceed 100 peak hours trips to determine the impact of the project on the State Highway System.

6. The City of Delano Redevelopment Agency shall implement the Redevelopment Plan for Project Area No. 1 to include infrastructure improvements to the City's transportation and circulation system which are needed to support economic development efforts, and attract new businesses to blighted areas of the community.

7. Needed improvements to the Pond Road and Woollomes Avenue ramps shall be timed to occur in conjunction with the commercial development projects planned for those areas.

STREET IMPROVEMENTS

Objectives

A. Protect rights-of-way for future street development.

Policies, Standards

1. Establish street dedication requirements as conditions of approval of development entitlements.

2. Establish official plan lines for all arterial and collector streets included in the Circulation Element of the General Plan.

MAINTENANCE/CONSTRUCTION

Objectives

A. Efficiently manage the construction and maintenance of the street and highway system.

Policies, Standards

1. The maintenance of the investment in the existing and future infrastructure is a high priority for the community.

2. The City shall maintain a high level of inter-governmental coordination and citizen participation in the circulation and transportation planning process and work with other agencies to assure that regional transportation plans are consistent with the City's General Plan.

3. Develop, maintain and update as appropriate a 7-year Capital improvement Program that identifies and provides adequate sources of funding for both maintenance and improvement of the street and highway system.

4. Develop a traffic monitoring system to assist in establishing a priority system for expending street and highway funds.

Objectives

B. Encourage the proximity of compatible land uses to reduce unnecessary travel.

Policies, Standards

1. Ensure that the provisions of the Circulation Element are integrated with those of the Land Use Element.

2. Encourage the development of truck terminals at appropriate locations adjacent to Hwy 99 to reduce truck parking in residential areas.

PARKING

Objectives

A. Promote a parking program that meets the needs of each land use type.

Policies, Standards

1. Adequate off-street parking shall be required of all commercial and industrial land uses to accommodate parking demand. Off-street parking shall also be required of multi-family residential land uses to accommodate tenants.

2. Parking standards shall be evaluated for new downtown development to ensure that parking requirements are satisfied within walking distance of development.

3. Parking standards shall be evaluated to assess the potential for offering reduced parking requirements to development that incorporate measures proven to reduce commute or customer trips.

4. Provide adequate parking areas at activity centers along major arterials.

5. Provide adequate parking facilities in the Central Business District (CBD) to accommodate the needs of the public.

6. Parking of commercial vehicles, gross vehicle weight rating 10,000 pounds or more, shall be prohibited on streets or building sites in residentially zoned districts except for pickup or delivery of persons or goods.

BICYCLE FACILITIES

Objectives

B. Provide various types of transportation modes throughout the City.

Policies, Standards

1. Maintain and encourage safe and interesting pedestrian and bicycle circulation routes throughout the City.

2. Rights-of-way considered for abandonment will be evaluated for use as bikeways and pedestrian paths and be acquired when feasible and desirable.

3. In order to provide a continuous and well integrated bikeway system linking public and private uses, a bicycle master plan will be prepared and adopted.

    a. *Bike lanes* are an on-street bikeway in which separate automobile and bicycle travel lanes are designed visually by signs and street markings. Bike lanes shall be implemented on new improved street or segments, where appropriate.

b. *Bike routes* are a system of streets with signs denoting them as a bike route, warning motorists to anticipate bicycles on these streets and indicating to bicyclists a desirable routing because of low traffic volumes or continuity to activity centers. Bike routes will be implemented on existing street segments.

c. *Bike paths* have their own right-of-way and are developed exclusively for bicycle travel and are entirely separate from streets and highways.

4. On street parking is prohibited on all new or improved sections of major streets planned for bike lanes where adequate street width is not available to accommodate both on street parking and a bike lane.

5. Secure bicycle parking facilities shall be required as conditions of approval for all new major activity centers, public and private places of assembly, and commercial or industrial developments.

PEDESTRIAN FACILITIES

6. Sidewalks, paths, and appropriate crosswalks should be located to facilitate access to all schools and other areas with significant pedestrian traffic. Whenever feasible, pedestrian paths should be developed to allow for unobstructed pedestrian flow from within a neighborhood.

7. The City shall require curb, gutter, and sidewalks in all areas of the community to accommodate pedestrian traffic, especially along routes with high pedestrian traffic such as schools, parks, and the Downtown area. Installation of these improvements shall be encouraged to the extent feasible in existing neighborhoods where they do not currently exist.

8. The City shall promote safe, convenient, and accessible pedestrian ways within the community.

9. Where walls or fences are proposed for residential developments along major arterials, arterials, or collector streets, pedestrian access will be provided between the major arterial, arterial, or collector, and the development to allow access to transit vehicles operating on the street.

10. Require street lighting within the rights-of-way of all public streets.

11. Include pedestrian signal indications as an integral part of the installation of traffic signals.

12. Assure adequate sidewalk maintenance.

PROVIDE A TRANSPORTATION SYSTEM THAT IS COST-EFFECTIVE, ENERGY-EFFICIENT, AND ENVIRONMENTALLY SENSITIVE

Objectives

A. Insure that the air pollution generated by transportation modes does not exceed required standards.

Policies, Standards

1. Maintain an automobile circulation system that promotes reduced vehicle travel.

2. The circulation system shall be designed and developed to minimize excessive traffic congestion, which would increase the rate of vehicle emissions. Development shall mitigate emission impacts primarily by implementing the standards of the San Joaquin Valley Unified Air Pollution Control District for a project's construction and operation/use.

3. A multi-modal transportation system shall be planned for that meets the needs of the community and improves air quality.

4. State and federal funds earmarked for bicycle and transit improvements will be vigorously pursued and used.

Objectives

B. Insure that noise emissions generated by transportation modes do not exceed acceptable noise standards.

Policies, Standards

1. The circulation system shall be designed and developed to minimize excessive noise impacts on sensitive land uses. Development shall mitigate its associated circulation related noise impacts.

2. Develop standards to screen various noise-sensitive land uses from the effects of heavy vehicular traffic.

3. Identify the heaviest transportation-related noise pollutants on the Noise Contour Map of the Noise Element.

4. Insure that heavy vehicles utilize Delano's Truck Route as a guide for maintaining an efficient circulation system.

5. Regulate the types of land uses in proximity to airport and railroad facilities.

Objectives

C. Provide a safe and convenient public transit system that meets the needs of all the economic segments of the community.

Policies, Standards

1. Maintain and expand the activities of the Delano Express Transit, the Delano Dial-A-Ride and similar operations, which offer residents safe and affordable transportation.

2. Continue to search for new and innovative alternatives that will provide a more efficient public transit system for the residents from all segments of the social and economic community.

3. Maximize the efficiency of transit services while minimizing costs by encouraging the consolidation of transit services within the metropolitan area.

4. Require transit improvements at all sites deemed appropriate and necessary by the Transportation Department and the transit provider and consistent with long range transit plans.

5. Coordinate transit services through the City's Community Services Department and in conjunction with surrounding cities, and the Counties of Kern and Tulare.

6. Provide benches, telephones and shaded areas at major transit destinations so people can utilize the transit system safely and comfortably. The City shall determine such need based on site plan review procedure and other planning implementation methods.

7. Major arterials, arterials, and collectors will be designed to allow transit vehicles to pull out of traffic. This policy may be implemented with either a continuous parking lane with bus stops, or with special bus pullout lanes.

8. Transit centers/stops shall be established to encourage the interface between commercial centers, high density residential uses and the transit system.

9. Encourage transit alternatives to meet the basic transportation needs of the young, the elderly, the handicapped, and the person without access to an automobile.

10. Maintain opportunities for a transit center within the City where alternative transit modes would connect.

11. Encourage and provide for ride sharing, park and ride, and other similar commuter energy savings programs.

Table 3-3 Future Level of Service

Road	Segment	Configuration	Future ADT	Future LOS
Benner Avenue	County Line to Cecil	4-lane undivided	1700	C
	Cecil to Garces	4-lane undivided	3200	C
Lytle Avenue	County Line to Cecil	2-lane undivided	900	C
	Cecil to Garces	2-lane undivided	1700	C
Casey Avenue	County Line to Cecil	4-lane undivided	3700	C
	Cecil to Garces	4-lane undivided	2400	C
Mettler Avenue	County Line to Cecil	4-lane undivided	10084	C
	Cecil to Garces	4-lane undivided	12764	C
Hiett Road	County Line to Cecil	2-lane undivided	800	C
	Cecil to Garces	2-lane undivided	12347	C
	South of Garces	2-lane undivided	5117	C
Albany Street	County Line to Cecil	4-lane undivided	4824	C
	Cecil to Garces	4-lane undivided	9799	C
Stradley Avenue	Garces to Woollomes	4-lane undivided	26716	C
	Woollomes to Schuster	4-lane undivided	6438	C
	Schuster to Pond	4-lane undivided	4733	C
Ellington (SR 155)	Cecil to 11th	2-lane undivided	4631	C
	11th to Garces	2-lane undivided	4275	C
SR 99	Avenue 16 to County Line	6-lane divided	91844	D
	County Line to Cecil	6-lane divided	95166	D
	Cecil to Garces	6-lane divided	92713	D
	Garces to Woollomes	6-lane divided	107660	E
	Woollomes to Pond	6-lane divided	102792	D
Fremont (SR 155)	Cecil to 11th	2-lane undivided	6187	C
	11th to Garces	2-lane undivided	5422	C
High Street	County Line to Cecil	4-lane undivided	6904	C
	Cecil to Garces	4-lane undivided	2709	C
	Garces to Woollomes	4-lane undivided	5274	C
Lexington Street	Cecil to Garces	2-lane undivided	5274	C
	Garces to Woollomes	4-lane undivided	11305	C
Norwalk Street	County Line to Cecil	2-lane undivided	3969	C
Randolph Street	County Line to Cecil	2-lane undivided	2701	C
	Cecil to Garces	2-lane undivided	4590	C
Mast Avenue	Garces to Woollomes	2-lane undivided	1700	C
	Schuster to Pond	2-lane undivided	500	C
Browning Road	County Line to Cecil	4-lane undivided	13221	C
	Cecil to Garces	4-lane undivided	17262	C
	Garces to Woollomes	4-lane undivided	27867	D
	Woollomes to Schuster	4-lane undivided	26928	D
	Schuster to Pond	4-lane undivided	21165	D
Bowman Avenue	County Line to Cecil	2-lane undivided	100	C
	Cecil to Garces	2-lane undivided	200	C
	Garces to Woollomes	2-lane undivided	400	C

Road	Segment	Configuration	Future ADT	Future LOS
	Woollomes to Schuster	2-lane undivided	200	C
	Schuster to Pond	2-lane undivided	500	C
County Line Road	Wasco-Pond to Benner	4-lane undivided	1200	C
	Benner to Casey	4-lane undivided	4700	C
	Casey to Melcher	4-lane undivided	6900	C
	Melcher to Albany	4-lane undivided	6022	C
	Albany to SR 99	4-lane undivided	7498	C
	SR 99 to Randolph	4-lane undivided	5636	C
	Randolph to Bowman	4-lane undivided	2911	C
20th Avenue	Wasco-Pond to Benner	2-lane undivided	300	C
	Benner to Casey	2-lane undivided	600	C
	Casey to Melcher	2-lane undivided	700	C
	Melcher to Albany	2-lane undivided	4729	C
	Albany to SR 99	2-lane undivided	6553	C
	Girard to Randolph	2-lane undivided	4292	C
	Randolph to Bowman	2-lane undivided	3053	C
Cecil Avenue	Wasco-Pond to Benner	4-lane undivided	2900	C
	Benner to Casey	4-lane undivided	13500	C
	Casey to Melcher	4-lane undivided	4917	C
	Melcher to Albany	4-lane undivided	21767	D
	Albany to SR 99	4-lane undivided	19193	C
	SR 99 to Randolph	4-lane undivided	12679	C
	Randolph to Bowman	4-lane undivided	9741	C
11th Avenue	Wasco-Pond to Benner	2-lane undivided	1000	C
	Benner to Casey	2-lane undivided	800	C
	Casey to Melcher	2-lane undivided	900	C
	Melcher to Albany	2-lane undivided	3966	C
	Albany to Fremont	2-lane undivided	6531	C
9th Avenue	Fremont to Randolph	2-lane undivided	4000	C
	Randolph to Bowman	2-lane undivided	1900	C
Garces Highway	Wasco-Pond to Benner	4-lane undivided	6700	C
	Benner to Casey	4-lane undivided	16700	C
	Casey to Melcher	4-lane undivided	17896	C
	Melcher to Albany	4-lane undivided	22294	D
	Albany to SR 99	4-lane undivided	15977	C
	SR 99 to Randolph	4-lane undivided	17469	C
	Randolph to Bowman	4-lane undivided	8756	C
Unknown	Melcher to Strdley	2-lane undivided	1200	C
	Stradley to SR 99	2-lane undivided	6800	C
	SR 99 to Mast	2-lane undivided	6900	C
	Mast to Bowman	2-lane undivided	1400	C
Woollomes Avenue	Stradley to Lexington	2-lane undivided	29955	E
	Lexington to Bowman	2-lane undivided	17652	C
Brooks Road	Mast to Bowman	2-lane undivided	400	C
Schuster Road	Stradley to Garzoli	4-lane undivided	9000	C
	Lexington to Bowman	4-lane undivided	4600	C

Road	Segment	Configuration	Future ADT	Future LOS
Spangler Road	SR 99 to Bowman	2-lane undivided	700	C
Pond Road	Stradley to Garzoli	4-lane undivided	14866	C
	Garzoli to Mast	4-lane undivided	15666	C
	Mast to Bowman	4-lane undivided	13229	C

4.0

OPEN SPACE AND CONSERVATION ELEMENT

4.1 INTRODUCTION

The City of Delano is currently in a transitional stage of growth from a small, semi-rural town to a medium-sized urbanized community. The City of Delano and its planning area have a number of valuable resources, including those of biological and cultural significance. Delano's unique environment affords the city the opportunity to encourage development while at the same time promoting the wise management of resources and open space for the benefit of the citizens of the community.

The Open Space and Conservation Element is intended to identify natural and man-made resources within the city, as well as to aid in the development of policies and implementation programs that will encourage the conservation, protection, and proper management of these resources. By identifying and encouraging the proper management of the community's resources, the city can assure their continual availability, appreciation, and enjoyment.

4.2 AUTHORIZATION

State legislation requires the inclusion of an Open Space Element (Government Code Section 65302(c)) and a Conservation Element (Government Code Section 65302(d)) in all local government general plans.

State legislation (Government Code Section 65561) declares that the preservation of open space land is necessary not only for the maintenance of the economy of the state, but also for the assurance of the continued availability of land for the production of food and fiber, for the enjoyment of scenic beauty, for recreation, and for the use of natural resources. The legislation further mandates that cities, as well as counties and the state, make definite plans for the preservation of valuable open-space land and take positive action to carry out such plans by the adoption and strict administration of laws, ordinances, rules, and regulations.

Land designated as open space may be utilized for the preservation of natural resources, including plant and animal life, as well as waterways. The designation of open space is also required for the managed production of resources including agricultural lands, areas required for recharge of

groundwater basins, and areas containing major mineral deposits. Open space may also be used for outdoor recreation. Open space for public health and safety purposes may include areas which require special management or regulation because of hazardous or special conditions such as earthquake fault zones, unstable soil areas, floodplains, watersheds, and areas required for the protection o water and air quality.

State legislation requires a Conservation Element for the conservation, development, and utilization of natural resources. Significant resources may include waterways, agricultural soils, wildlife, minerals, energy and air resources, cultural resources, and other natural assets. The Conservation Element may further cover the prevention, control, and correction of soil erosion, the prevention and conservation of watersheds, and flood control conservation methods to protect land in stream channel areas.

ENVIRONMENTAL SETTING

4.3 EARTH

4.3.1 Project Location and Description

The City of Delano is located within the northwestern portion of Kern County, thirty-two miles north of Bakersfield, and 70 miles South of Fresno, California. The City is located in the southern portion of California's agriculturally rich San Joaquin Valley, ten miles from the western foothills of the Sierra Nevada Mountain Range and approximately twenty-five miles from the Coast Range to the west. The natural resources and gentle topography of Delano has made it hospitable to agriculture.

The City has surrounded by productive farmland and is known for production of table grapes, almonds, and citrus. The Southern Sierra Nevada Mountain range is situated approximately 25 nautical air miles to the east. Recreational areas located nearby include Lake Isabella and the Sequoia National Park and Forest.

4.3.2 Topography

Delano is situated in the San Joaquin Valley. The topography of this portion of Kern County is typical of the relatively flat gradient encountered throughout the San Joaquin Valley, with uniform east to west trending slopes of about three to ten feet per mile. The average elevation of Delano is 300-325 feet above sea level.

4.3.3 Geology

Setting and History - The San Joaquin Valley is a structural trough, whose main axis trends northwest-southeast. The San Joaquin Valley is bordered on the east by the granitic complex of the Sierra Nevada and on the west by the folded and faulted sedimentary, volcanic, and metamorphic rocks of the Coast Range. The relatively flat floor of the San Joaquin Valley overlies thousands of feet of alluvial, lacustrine and marine deposits that have accumulated in the valley as the trough has been lowered and the adjacent mountains have been elevated.

Throughout Late Cretaceous and much of Tertiary time, the San Joaquin Valley was the site of marine deposition, and thousands of feet of shallow-water marine sediments were deposited in this geosyncline. Presently overlying these marine sedimentary deposits are continental deposits of late Tertiary and Quaternary age. In aggregate, these marine and continental deposits form an immense wedge, which thickens from east to west and from north to south. The continental deposits have been tilted to the west and down warped, and their base is now several hundred to many thousand feet below sea level.

The low alluvial plains and fans in the Valley floor are relatively flat and featureless, occupying most of the floor's area. The extensive fans along the eastern margin of the Valley contain high proportions of well-sorted gravel and sand, while the interstream areas between the fans are underlain by poorly sorted, fine-grained fluvial sediment deposited by intermittent streams.

4.3.4 Earthquakes and Related Effects

Although no faults have been mapped immediately near Delano, several major faults can be found in Kern County. These include the San Andreas Fault, the Garlock Fault, the Sierra Nevada Fault and the Kern Canyon Fault. Most of the earthquake epicenters and faults are located in eastern and southwestern Kern County. The City's mild topography and low elevation negate threats of landslides, liquefaction, settlement or other seismically-related hazards. Numerous canals, levees and other earthen water containment structures within and near the City pose potential flooding hazards to property and residents of Delano. This is discussed in greater detail in the Hydrological Conditions Section.

4.3.5 Soils

Agricultural soil capacity is classified according to a number of criteria including prime farmland, farmland of statewide importance and unique farmlands. The U.S. Department of Agriculture Soil Conservation Service defines these farmlands as:

> **Prime farmland** is land best suited for producing seed, feed, forage, fiber, and oilseed crops and also available for these uses (the land could be cropland, pasture land, rangeland, forest land or other land but not urban built-up land or water). It has the soil quality, growing season and moisture supply needed to produce sustained high yields of crops economically when treated and managed, including water management, according to modern farming methods.

Farmland of statewide importance is land other than prime farmland that has a good combination of physical and chemical characteristics for production of food, feed, forage, fiber and oilseed crops available for these uses (the land could be cropland, pasture range land forest land or other land, but not urban built-up land or water).

Unique farmland is land other than prime and farmlands of statewide importance that is used for the production of specific high-value food and fiber crops. It has the special combination of soil quality, location, growing season and moisture supply needed to produce sustained high quality and/or high yields of a specific crop when treated and managed according to modern farming methods. Examples of such crops are citrus, olives, cranberries, fruit and vegetables.

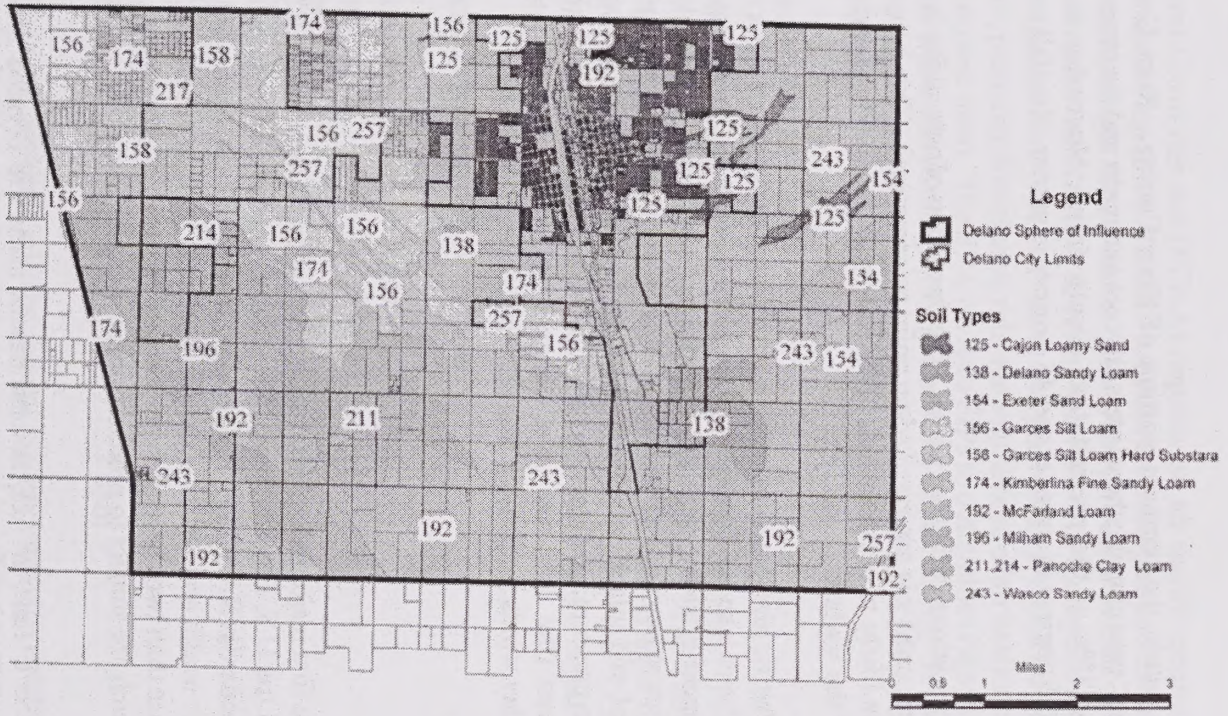
As described by the U.S. Soil Conservation Service, the soils of the Delano area fall primarily into the associations shown on Table 4-1. Figure 4-1 shows the location of these soils in relationship to the City of Delano.

Table 4-1
General Soil Characteristics
Within the Delano Planning Area

Soil Type – Name	Drainage	Prime Farmland
Cajon Loamy Sand	Somewhat excessive	Yes
Delano Sandy Loam	Well	Yes
Exeter Sandy Loam (0-2% slope)	Well	No
Exeter Sandy Loam (2-9% slope)	Well	No
Garces Silt Loam	Well	No
Garces Silt Loam, Hard Substrata	Well	No
Kimberlina Fine Sandy Loam	Well	Yes
McFarland Loam	Well	Yes
Wasco Sandy Loam	Well	Yes
Milham Sandy Loam (0-2% slope)	Well	Yes
Panoche Clay Loam (0-2% slope)	Well	Yes

4.3.6 Mineral Resources

There are no significant mineral resources or mining operations in Delano, or its sphere of influence.



Soil Types
City of Delano

Fig. 4-1

4.4 CLIMATE AND AIR QUALITY

4.4.1 Climate

The City of Delano is located within the northern portion of Kern County. Kern County is characterized by a "Mediterranean" type climate; the winters are cool and moist and the summers are dry and warm. Approximately 85% of the precipitation occurs during November to April. Temperatures 24 hour average 86.5 degrees in summer and 45 degrees in winter. Rainfall averages 7.95 inches per year.

Kern County experiences foggy conditions during the winter. The formation of natural fog is caused by local cooling of the atmosphere until it is saturated (dew point temperature). This type of fog, known as "radiation fog" is more likely to occur inland. These fogs are more severe and persist longer in the lower elevations of the Valley.

During the summer months, the Pacific high pressure cell is positioned over the ocean to the west of the northern California coast. The clockwise flow of air around the high pressure cell results in persistent northwest winds over most offshore areas. This northwesterly flow is enhanced by the thermal trough through the interior valleys of California. The orientation of this trough and the pressure gradient between coastal and inland stations determines the variability in the summer weather pattern. Strong onshore pressure gradients occur with deep penetrations of marine air through the Carquinez Strait area (the only sea level channel through the coast). Cooler temperatures and stronger up-valley winds result from this distribution.

4.4.2 Air Quality Standards

Federal Regulations

The Clean Air Act of 1970 was the first major federal air quality regulation. Amended in 1977 and 1990, the Clean Air Act required the U.S. Environmental Protection Agency (EPA) to establish National Ambient Air Quality Standards (NAAQS) for several pollutants. These standards are set by law at levels that protect public health and welfare, with an adequate margin of safety. Areas exceeding the federal standard more than two times per year are designated "nonattainment" areas under the Clean Air Act, and as such are subject to more stringent planning and pollution control requirements.

Under the 1990 amendment to the Clean Air Act, nonattainment areas are divided into five categories depending on future dates identified for meeting the standards. "Marginal" or "moderate" violators only slightly exceed the NAAQS, whereas "serious," "severe," or "extreme" violators exceed the standards by a much higher margin. Marginal areas are required to do little beyond what they are already doing to attain clean air, but areas designated "moderate" through "extreme" must adopt gradually tighter regulations. States with areas designated "moderate" or worse for ozone nonattainment areas are required to show a three percent per year reduction in emissions of volatile organic compounds.

Areas close to meeting Carbon Monoxide (CO) standards are required to start a wintertime oxygenated fuels program and to correct problems with existing vehicle inspection programs. Areas with higher levels of CO must also start an enhanced vehicle inspection program, and those areas with the highest CO levels must adopt transportation control measures.

The Federal Clean Air Act (FCAA) requires an air quality control plan referred to as the State Implementation Plan (SIP). The SIP contains the strategies and control measures California will use to attain the NAAQS. The Federal Clean Air Act Amendments of 1990 require states containing areas that violate the NAAQS to revise their SIPs to incorporate additional control measures to reduce air pollution. The SIP is to be periodically modified to reflect the latest emissions inventories, planning documents, rule and regulations of air basins as reported by the agencies with jurisdiction over them. The EPA reviews SIPs to determine if they conform to the mandates of the FCAA and will achieve air quality goals when implemented. If the EPA determines a SIP to be inadequate, it may prepare a Federal Implementation Plan (FIP) for the nonattainment area and may impose additional control measures.

State Regulations

In 1988, the California Clean Air Act (CCAA) was passed. The act contains more stringent guidelines for the attainment of air quality goals than the FCAA. The California Air Resource Board (ARB) is the agency responsible for coordination and oversight of state and local air pollution control programs in California and for implementing the CCAA. The CCAA classifies nonattainment areas as moderate, serious, severe, and extreme based on severity of violation of state ambient air quality standards as follows:

Ozone Nonattainment Classifications

- Moderate 0.09 to 0.12 ppm
- Serious 0.13 to 0.15 ppm
- Severe 0.16 to 0.20 ppm
- Extreme Greater than 0.20 ppm

Carbon Monoxide Nonattainment Classifications

- Moderate 9.0 to 12.7 ppm
- Serious Greater than 12.7 ppm

Both the State of California and the federal government have established a variety of ambient air quality standards. The state 1-hour ozone standard is 0.09 ppm (parts per million, by volume), not to be equaled or exceeded. The federal 1-hour ozone standard is 0.12 ppm, not to be exceeded more than 3 times in any 3-year period. The air basin is also a non-attainment area for PM_{10}.

San Joaquin Valley Unified Air Pollution Control District

The City of Delano lies within the Kern County portion of the San Joaquin Valley Air Basin (SJVAB). The San Joaquin Valley Unified Air Pollution Control District (SJVUAPCD) was organized in 1991 by a Joint Powers Agreement of eight Valley counties, is the local lead agency for formulating Federal and State Air Quality plans, promulgating rules that affect a variety of air pollution sources, and reviewing local governments' land use plans and development proposals in order to estimate projected air quality impacts and suggest methods for reducing those impacts.

The San Joaquin Valley Unified Air Pollution Control District has jurisdiction over air quality matters in the San Joaquin Valley Air Basin. Its headquarters are located in Fresno with regional offices located in Bakersfield and Modesto.

The SJVUAPCD has adopted two attainment plans in an attempt to achieve state and federal air quality standards: the 1991 California Clean Air Act Quality Attainment Plan (AQAP) for ozone and carbon monoxide and the PM_{10} Nonattainment Area Plan. These documents provide the framework for air quality planning in the Valley and lay out the District's strategy to reduce emissions of nonattainment pollutants. In August 1992, the ARB reviewed and approved several portions of the 1991 AQAP. The Air Resources Board (ARB) postponed a decision on the Plan's ozone strategies until more information could be collected. The District was re-designated as a serious nonattainment area for PM_{10} by the EPA. The District approved and submitted a Serious Area PM_{10} Nonattainment Plan in September 1994.

4.4.3 Air Quality Monitoring Data

Air quality in the project area is best represented by air monitoring data collected by the State of California Air Resources Board at the Visalia air monitoring station. Based on air quality data for 1996, PM_{10} pollutants exceeded state standards twenty-five out of sixty-one days and federal standards were not exceeded out of sixty-one days. Ozone pollutants exceeded federal standards four days and state standards fifty-three days in 1996. No standard violations were observed for sulfur dioxide, carbon monoxide, or nitrogen dioxide. The pollutants, which have exceeded state or federal standards in the Kern County area, are provided below:

Ozone (O3)

Ozone is highly reactive secondary gas pollutant, which is toxic, colorless and has a pungent odor. Ozone is photochemically produced through complex chemical reactions of certain hydrocarbons and oxides of nitrogen (primary pollutants) in the presence of sunlight and temperatures above 59°F. In high concentrations, ozone and other photochemical oxidants are directly detrimental to humans causing respiratory irritation and possible alterations in the functioning of the lungs and inhibits vegetation growth.

Ozone is a regional air pollutant. It is generated over a large area and is transported and spread by wind. The worst ozone concentrations tend to be found downwind from emission sources in Valley metropolitan areas. Ozone has been the San Joaquin Valley's most obstinate air quality problem.

Particulate Matter (PM_{10})

PM_{10} refers to particulate matter equal to or less than 10 microns in diameter. This material, as opposed to dust, cannot be adequately filtered by the human respiratory system. Inhaled atmospheric particulates can, therefore, be harmful to humans by directly causing injuries to the respiratory tract and lungs or by the reactive gases which were absorbed by the inhaled particulates. Suspended particulates scatter and absorb sunlight, producing haze and reducing visibility. In areas close to major sources including industrial and agriculture operations, PM_{10} is generally higher in the winter when more fuel is burned and meteorological conditions favor buildup of directly emitted contaminants.

The actual composition of PM_{10} varies greatly with time and location. It depends on the sources of the material and meteorological conditions. Primary man-made sources of PM_{10} in the San Joaquin Valley are agricultural operations, agricultural burning, demolition and construction activities, entrainment of dust by motor vehicles on paved and unpaved roads, and residential wood burning. Wind erosion of agricultural land also represents a significant source of air borne dust in the Valley.

4.5 HYDROLOGIC CONDITIONS

4.5.1 Surface Waters

Delano does not have any actual surface water that runs through it. There are irrigation canals that traverse peripheral properties. Lake Woollomes, located southwesterly of the community is a storage facility for the Friant-Kern Canal.

In 1982, the Federal Emergency Management Agency (FEMA) prepared a Flood Insurance Study that investigated the existence and severity of flood hazards in the City of Delano. The hydrologic and hydraulic analyses for this study were performed by the U.S. Army Corps of Engineers. This initial work, which was completed in December of 1980, covered all significant flooding sources affecting Delano.

The FEMA study used the national standard of the 100-year flood as the base flood-line for purposes of flood plain management measures. For those areas subject to shallow flooding and deep ponding, boundaries of the 100-year flood were delineated using the appropriate elevations, depths and topographic maps at a scale of 1:24,000, with a contour interval of five feet. Flood boundaries are indicated on the Flood Insurance Rate Map (FIRM). On this map, the 100-year flood boundary corresponds to the boundary of the areas of special flood hazards; and the 500-year flood boundary corresponds to the boundary of the areas of moderate flood hazards. Figure 4-2 is a flood map of the Delano Area. The FEMA Flood Study depicted areas within the City limits which are classified as Flood Hazard Zone "A". The airport is in one such area.

FEMA Flood Map
City of Delano

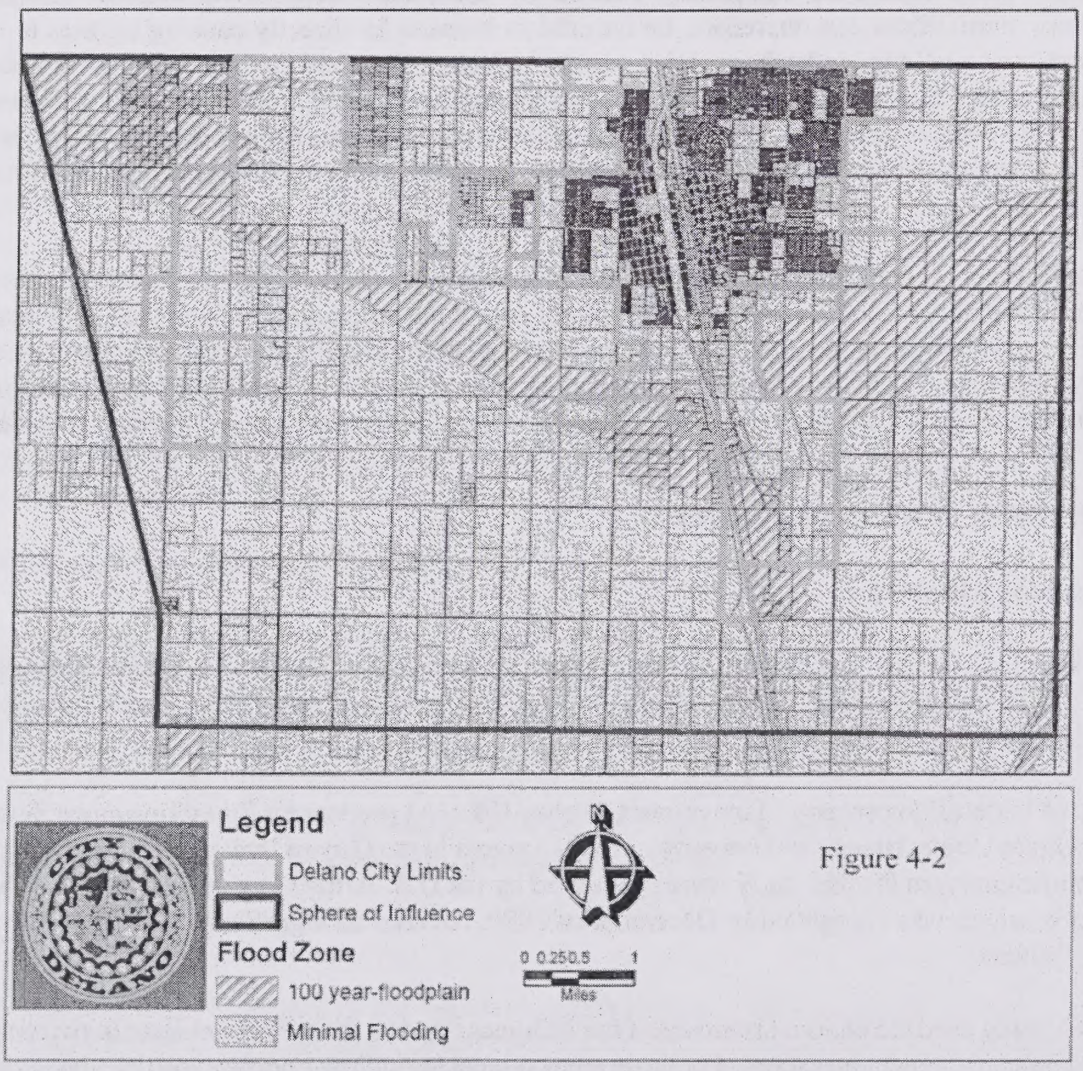


Figure 4-2

4.5.2 Ground Water

The primary source of domestic water for the City of Delano is groundwater. In general the groundwater quality of the City is relatively high. Production is generally low east of the community based on recent test wells east of Browning Road. Two existing wells and new well sites in the City will require treatment to remove DBCP, most likely using carbon filters. Other than this contaminant, the City's groundwater supply is suitable for domestic purposes without treatment. Prior to agricultural and urban development, groundwater moved from areas of recharge along the eastern rim of the Valley to areas of discharge along the Valley axis. Recharge was primarily by seepage from stream flows. Under present conditions, groundwater is recharged primarily from stream flow percolation, from percolation basins developed by agricultural irrigation districts, by percolation from treated wastewater disposal facilities and from percolation attributed to excess applied surface irrigation water. Data from the regional map produced by the State of California, Department of Water Resources (DWR), San Joaquin District, entitled *Lines of Equal Depth to Water in Wells, San Joaquin Valley*, depicts groundwater flowing toward the southwest.

4.6 BIOLOGICAL RESOURCES

4.6.1 Plant Communities

Historically, the natural vegetation of the Delano area was characterized by vast stretches of savanna, Valley Needlegrass Grassland, Valley Sacaton Grassland, and Non-native Grassland natural vegetation communities. The range of these natural vegetation communities has been significantly reduced from historic levels as a result of conversion of these lands to urban and agricultural uses. The only remnants of these natural communities presently remain in the Central Valley. The following natural community classifications are from *Preliminary Descriptions of the Terrestrial Natural Communities of California* (Holland 1986). Descriptions are incorporated by reference from Crampton (1974), Holland (1986), and Barbour and Major (1988).

> Valley Needlegrass Grassland is characterized by the presence of tussock-forming perennial purple stipa (*Stipa pulchra*) and nodding stipa (*S. cernua*). These native bunchgrasses are often surrounded by native and introduced annuals, which often exceed the bunchgrasses in cover. Aggressive, well adapted European annuals, introduced by 18th Century Spanish soldiers and missionary fathers, have largely replaced native perennial in California. Valley Needlegrass Grassland is often associated with Oak Woodlands on moister, well drained soils. Formerly extensive around the Sacramento, San Joaquin, and Salinas Valleys, as well as the Los Angeles Basin, perennial grasslands are now reduced to scattered remnants in the foothills of the Central Valley and the hills along the coast in central and southern California.
>
> Valley Sacaton Grassland is characterized by the presence of tussock-forming perennial grasses alkali sacaton (*Sporobolus airoides*) and saltgrass (*Distichlis spicata*). Valley Sacaton Grassland flourished on the alkaline flats of the Central Valley. Some annuals also grow on the alkali, namely alkali barley (*Hordeum*

depressum) and California alkali grass (*Puccinellia simplex*). Formerly extensive in the Tulare Lake Basin and along the San Joaquin Valley trough north to Stanislaus and Contra Costa Counties, Valley Sacaton Grassland is now much reduced.

Non-native Grassland is characterized by the presence of introduced grass species that may be interspersed with native forbs and shrubs. Typical species found in this natural community are wild oats (*Avena fatua*), slender wild oats (*Avena barbata*), the filarees (*Erodium cicutarium* and *E. botrys*), soft chess (*Bromus mollis*), ripgut brome (*Bromus rigidus*), red brome (*Bromus rubens*), and rye grass (*Lolium multiflorum*). This grassland community is often associated with numerous species of showy-flowered, native annual forbs ("wildflowers"), especially in years of favorable rainfall. Non-native grassland is found in the valleys and foothills of most of California, except for the north coastal and desert regions. Non-native Grassland formerly occupied large portions of the Sacramento, San Joaquin, and Salinas Valleys, as well as the Los Angeles Basin, areas that are now agricultural and urban.

Plant species represented in the general vicinity are indicated in Table 4-2. Sensitive plant species have been recorded and include the California Jewel Flower and the Valley Saltbush Scrub community.

4.6.2 Agricultural Communities

The agricultural community surrounding the City of Delano consists of both large and small farms. Crops typically grown in the area generally include grapes, plums, citrus, stone fruit, almonds, and alfalfa.

Although not prime habitat, croplands in the area can provide a source of food, water, and shelter to both native and introduced wildlife species. The lack of hedgerows, shelter-belts, wind breaks, and natural vegetation buffers severely limits the habitat value of these man-made environs. In addition, agricultural practices such as herbicide and pesticide application, monocultural cropping, and intensive tillage further reduces the habitat value of these lands.

4.6.3 Sensitive Species

The above listed vegetation associations support a variety of wildlife, plant species and subspecies indigenous to California. The conversion of native and naturalized plant communities to urban land uses, agriculture, and industrial facilities has significantly reduced available wildlife habitat. As a result of this conversion, several species of both plants and animals have been extirpated from California, or their populations have declined significantly. As a result, the California Department of Fish and Game (CDFG) and the United States Fish and Wildlife Service (USFWS) have listed some species as threatened or endangered. In addition, several species, which are currently considered candidates for State or federal listing, have been included.

Table 4-2
Plant Species List

Common Name	Scientific Name
Baby Blue Eyes	*Nemophila menziesii*
Buffalo Gourd	*Cucurbita foetidissima*
California Poppy	*Eschscholtzia californica*
Centaury	*Centaurium calycosum*
Common Owl's Clover	*Orthocarpus purpuracens*
Common St. Johnswort	*Hypericum perforatum*
Common Sunflower	*Helianthus annuus*
Cowpen Daisy	*Verbesina encelioides*
Cream Cup	*Platystemon californicus*
Devils Claw	*Proboscidea altheaefolia*
Elegant Brodiaea	*Brodiaea elegans*
False Baby Stars	*Linanthus androsaceus*
Fiddleneck	*Amsinckia retrorsa*
Field Milkvetch	*Astragalus agrestis*
Flatpod	*Idahoa scapigera*
Goldfields	*Lasthenia chrysostoma*
Hooker's Evening Primrose	*Oenothera hookeri*
Idaho Fescue	*Festuca idahoensis*
Miniature Lupine	*Lupinis bicolor*
Prairie Star	*Lithophragma parviflorum*
Purple Needlegrass	*Stipa pulchra*
Rabbit Brush	*Chrysothamnus nauseosus*
Red Clover	*Trifolium pratense*
Redtop	*Agrostis alba*
Rosin Week	*Calycadenia truncata*
Showy Thistle	*Cirsium pastoris*
Shrubby Cinquefoil	*Potentilla fruticosa*
Snakehead	*Malacothrix coulteri*
Spreading Dogbane	*Apocynum androseafolium*
Spreading Fleabane	*Erigeron divergens*
Sweet Fennel	*Foeniculum vulgare*
Threadleaf Phacelia	*Phacelia linearis*
Velvet Grass	*Holcus lanatus*
Vinegar Weed	*Trichostoma lanceolatum*
White Sweet Clover	*Melilotus alba*
Wild Blue Flax	*Linium perenne*

For this report, the terms "species of concern" or "special status" species refers to those species viewed with special concern by the USFWS under the Federal Endangered Species Act, by CDFG under the California Endangered Species Act, and the Natural Diversity Data Base "Special Animals" (CDFG 1994a, 1994b, 1992). Attention is also given to those species given special status by various private conservation organizations. The assessment of effects to sensitive species includes those species listed under the following categories:

▪ Endangered	Listed as Endangered by the Federal Government
▪ Threatened	Listed as Threatened by the Federal Government
▪ Federal Candidate	Candidate for Federal listing (Taxa for which the U.S. Fish and Wildlife Service has sufficient biological information to support a proposal to list as Endangered or Threatened)
▪ Federal Species of Concern	Candidate for Federal listing (Taxa for which existing information may warrant listing, but for which substantial biological information to support a proposed ruling is lacking) prior to September 1, 1995.
▪ State Endangered	Listed as Endangered by the State of California
▪ State Threatened	Listed as Threatened by the State of California
▪ State SSC	California Department of Fish and Game "Species of Special Concern"

Existing data were reviewed to determine the historic occurrence of special status (i.e. sensitive) species and habitats in the project area, including CNDDB records, literature records, and local environmental documents. Only historic occurrences of these species have been recorded for the area. The current status of these species is shown in Table 4-3.

Table 4-3
Sensitive Species of the Central Valley Which Potentially Occur Within or Near the Delano General Plan Area

Common Name	Scientific Name	Status	
Plants			
Valley Saltbush Scrub			
California Jewel Flame	*Caulonthus Californucys*	FE	1B
Recurved Larkspur	*Delphinium recurvatum*	FSC	
Animals			
San Joaquin kit fox	*Vulpes macrotis mutica*	FE	CE
Tipton kangaroo rat	*Dipodymus nitratoides*	FE	—
California tiger salamander	*Ambystoma tigrinum californiense*	FC1	—
Western burrowing owl	*Athene cuncicularia hypugea*	FSC	
Northern harrier	*Circis Cyaneus*	FSC	
Blunt nose leopard lizard	*Gambelia silus*	FE	

Notes:

FE Federally Endangered
FC Federal Candidate; the threat and/or distribution data is sufficient to support listing.
FC1 Federal Candidate Species - Category 1
FC2 Federal Candidate Species - Category 2
FSC Federal Species of Concern; (formerly Federal Candidate Category 2 species) the threat and/or distribution data insufficient to support listing at this time.
CE California Endangered
1B California Native Plant Society (CNPS) - Plants rare and endangered in California and elsewhere

4.7 CULTURAL RESOURCES

A cultural resources records search was conducted for this project utilizing the database of the Southern San Joaquin Valley Information Center, California State University, Bakersfield. The results of the search indicated there was one recorded archaeological site in the vicinity (CA –Ker – 2989H), the abandoned "domestic refuse" site in southwestern Delano. Artifacts have also been discovered during airport construction. The "Weaver House" located at 330 Lexington has potential eligibility for the National Register of Historic Places. A mortuary designed in 1962 by Frank Lloyd Wright for Cecil and Betty LaCourse has been identified near Browning and 9th.

4.8 LIGHT AND GLARE

Generally, concerns over light and glare relate to the aesthetics of an area when a new light source is introduced in a relatively undeveloped or rural area. In other instances, new light sources can become a nuisance to adjacent land uses and possibly cause a hazardous condition for traffic. Delano is a small rural community limited to primarily one- and two-story structures in commercial and residential neighborhoods. Current sources of illumination in the community consist of street lamps, minor identification signage and other lighting associated with existing development. There are no existing glare impacts (i.e. buildings constructed of highly reflective materials) occurring within the Delano Area.

Development and growth in the City of Delano has resulted in increased night lighting in the region. Much of this development has occurred in the southwest and southeast quadrants of the City.

4.9 PUBLIC SAFETY

4.9.1 Risk of Upset

Seismic Hazards - The most serious direct earthquake hazard is the damage or collapse of buildings and other structures by ground shaking. Ground shaking is the vibration which radiates from the epicenter of an earthquake. Damage to structures from ground shaking is caused by the transmission of earthquake vibrations from the ground into the structure. The intensity of the vibration or shaking and its potential impact on building and other urban development is determined by several factors:

- The nature of the underlying materials, including rock and soil;
- The structural characteristics of a building;
- The quality of workmanship and materials used in its construction;
- The location of the epicenter and the magnitude of the earthquake; and
- The duration and character of the ground motion.

Older buildings constructed before building codes were in effect, and even newer buildings constructed before earthquake resistance provisions were included in building codes, are the most likely to suffer damage in an earthquake. Most of Delano's buildings are one or two stories high and are of wood frame construction, which is considered the most structurally resistant to earthquake damage.

Older masonry buildings without earthquake-resistant reinforcement are the most susceptible to the sort of structural failure, which causes the greatest loss of lives. The susceptibility of a structure to damage from earthquake ground shaking is also related to the foundation material underlying the structure. A foundation of rock or very firm material intensifies short period motions, which affect low-ridged building more that tall, flexible ones. A deep layer of logged soft alluvium may cushion low ridged buildings, but accentuate the motion in tall buildings. The amplified motion resulting from softer alluvium soils can also severely damage older masonry buildings. Some unreinforced masonry buildings are located in downtown Delano. No assessment of these buildings has been made.

Other potentially dangerous conditions include building projections, which are not firmly anchored, such as parapets and cornices. These projections could collapse during periods of strong and/or sustained ground shaking.

Fire is often a major form of damage resulting from ground shaking effects. Most earthquake-induced fires start because of ruptured gas lines, damage to wood, gas or electric stoves and damage to other gas or electric equipment.

Flooding Hazards - Flood hazards are addressed in the Safety Element.

Fire Hazards - Both structural and wildland fire hazards threaten life and property within the Delano vicinity. Wildland fires resulting from both man-made and natural causes occur in brush, or grasslands, primarily in sparsely developed or existing open space lands. Structures and urban development may also be threatened or destroyed in the area of wildland fires. Structural fires usually result from man-made causes and threaten industrial, residential and commercial structures, especially those built before building and fire codes were established. These substandard structures represent the highest potential for injury, death, or loss of property.

4.10 AGRICULTURE

Objectives

A. To preserve prime farmland and farmland of statewide importance until logical and timely urban growth is appropriate.

B. To provide a "greenbelt" around the City's perimeter to maintain the physical separation between the City and nearby communities and to maintain the scenic beauty surrounding the City.

C. To establish logical growth patterns as a means of protecting agriculture.

Policies, Standards

1. Assure the continuation of agricultural production as an important economic activity by establishing areas to be designated and maintained as part of the City's greenbelt.

2. New residential development shall be encouraged as infill parcels and within areas adjacent or in close proximity to existing development where infrastructure and services can be easily extended. This measure is intended to reduce the unnecessary removal of finite natural resources, such as prime soil, to reduce the cost of community services provided to residents, and to eliminate "leap frog" development.

3. Extension of urban improvements and services, including water, sewer lines and storm drain facilities, into agricultural areas shall be managed as a means to direct the location and timing of new urban development.

4. The City shall give preference to new development projects that are proposed for non-prime agricultural soils.

5. To protect human health from potential impacts due to agricultural spraying, dust, and traffic congestion, the City will encourage lower density developments adjacent to land planned for long-term agricultural uses.

6. Maintain an appropriate minimum parcel size for agricultural and urban reserve designated parcels to encourage viable agricultural operation and to prevent parcelization into rural residential or "ranchette" developments.

7. Increase residential densities on infill parcels by encouraging the development of PUD's.

4.11 NATURAL RESOURCES

Objectives

A. To protect natural resources including groundwater, soils, and air quality, to meet the needs of present and future generations.

B. Ensure that environmental hazards including potential flooding and impacts from agricultural practices are adequately addressed in the development process within the City.

Policies, Standards

1. Protect areas of natural groundwater recharge from land uses and disposal methods, which would degrade groundwater quality. Promote activities, which combine stormwater control, and water recharges.

2. Expand programs that enhance groundwater recharge in order to maintain the groundwater supply, including the installation of detention ponds in new growth areas.

3. No urban level development shall be approved in the City unless the development is, or can be served by the City sewer system.

4. Water conservation methods shall be continued.

5. To assist the City in meeting the clean air quality requirements of the federal and state Clean Air Acts, the City will provide community planning guidance to help reduce potential air quality impacts.
6. Promote biological diversity and the use of plant species compatible with the bio-region.

7. If street trees are removed, they shall be replaced with tree species specified on the City's Street Tree Master Plan.

8. Construction activities shall comply with the PM_{10} control measures as set forth by the San Joaquin Valley Unified Air Pollution Control District's *Guide for Assessing and Mitigating Air Quality Impacts* (GAMAQI).

9. The Joaquin Valley Unified Air Pollution Control District's *Guide for Assessing and Mitigating Air Quality Impacts* will be used to evaluate and mitigate the effects of new developments to the extent feasible.

10. Properties which may have listed plant and animal species will be required to have biological investigation if such species may be present. Federal and State protocols and requirements shall be used for such surveys and needed mitigation.

11. Construction activity will be conducted in the manner presented in Section VIII of Appendix K of the *CEQA Guidelines*, which describes procedures to employ in the event of discovery or recognition of any human remains.

5.0

HOUSING ELEMENT

5.1 INTRODUCTION

5.1.1 Regional Location

The City of Delano (population 39,489) is located in the southern portion of San Joaquin Valley, in the northern part of Kern County just south of Tulare County. Delano is within a short driving distance of several metropolitan areas. To the north are the Cities of Fresno (75 miles), Sacramento (240 miles), and San Francisco (250 miles). To the south are the Cities of Bakersfield (30 miles) and Los Angeles (140 miles).

Agricultural fields and open space, a typical characteristic of towns in the San Joaquin Valley, physically separate Delano from these neighboring communities. Irrigated agriculture, the signature characteristic of the valley, is found throughout the valley on its highly fertile alluvial soils.

5.1.2 Background and Purpose of the Element

Many Californians with average or less than average incomes find it difficult to secure adequate housing they can afford. Since the early 1980s, the problem of finding adequate housing for lower-income groups has been compounded by high housing costs, lack of readily developable land in many communities, and the decreased ability of the State and Federal governments to fund housing programs.

Although general plan housing elements were mandated by State legislation enacted in 1967, the State undertook a major revision of housing element law in response to rapidly increasing housing prices. As a result, each city and county must analyze local housing needs, and provide a realistic set of programs to meet those needs. The State housing policy that sets forth this requirement includes the following:

a. *"...The availability of housing is of vital Statewide importance, and the early attainment of decent housing and a suitable living environment for every California family is a priority of the highest order." (Section 65580, State of California Government Code.)*

b. *"... The early attainment of this goal requires cooperative participation of government and private sectors in an effort to expand housing opportunities and to accommodate the housing needs of Californians of all economic levels." (Ibid.)*

c. "... Local and State governments have a responsibility to use the powers vested in them to facilitate the improvement and development of housing to make adequate provision for the housing needs of all economic segments of the community." (Ibid.)

d. *"... in carrying out this responsibility, each local government also has the responsibility to consider economic, environmental, and fiscal factors and community goals set forth in the General Plan and to cooperate with other local governments and the State in addressing regional housing." (Ibid.)*

The City of Delano is therefore required to:

- Identify and analyze the current and projected housing needs of "all economic segments of the community;"
- Evaluate current and potential constraints to meeting those needs, due both to marketplace and government operations;
- Assess the availability of land suitable for residential use and opportunities for energy conservation in residential development;
- Set forth objectives, policies, and programs that set forth a 5-year schedule of actions to meet identified housing needs,[1] and to remove governmental and non-governmental constraints on the production of housing, the administration of land use and development controls, provision of regulatory concessions and incentives, and the utilization of appropriate federal and State financing and subsidy programs and, when available, funds in a low and moderate income housing fund of a redevelopment agency; and
- Address needs for emergency shelter for the homeless.

5.1.3 Citizen Participation

The legislature requires that local housing elements be prepared with the participation of all economic segments of the community. The preparation of the Housing Element included the following citizen participation activities:

1. A workshop with local affordable housing providers and housing/ farm worker interests with a Spanish/English interpreter provided;
2. Public notices and announcements in both English and Spanish; and
3. Public hearings, including the Planning Commission and City Council.

To ensure that all economic segments of the community, including lower income individuals and organizations, would be involved in the development of the Housing Element, the City of Delano

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1 "Identified housing needs" includes production of new housing to meet the needs of new households of all economic segments of the community, conservation of existing sound housing, improvement of existing substandard housing, protection of existing housing affordability, promotion of equal housing opportunities, and meeting the needs of identified "Special needs" groups (e.g., elderly, homeless, large families, farm workerfarm workers, one parent households, handicapped). The needs of the homeless are also required to be addressed in municipal housing elements.

encouraged the following organizations to attend the community workshop by inviting these groups directly. Additionally, notices of these public workshops were posted in both English and Spanish at the senior and recreation centers, library, City Hall, and throughout the community in public places.

Housing Authority of the County of Kern	Self Help Enterprises
Delano Assoc. for the Developmentally Disabled	Bingley Homes
Delano Community Connections	Workman Brothers
Center for Race Poverty and the Environment	Bethany Homeless Center
County of Kern Planning Department	United Farm Workers
Community Development Program Department	California Rural Assistance League
Proteus	Bank of America
Scott Townsend	San Joaquin Bank
Wells Fargo Bank	Union Bank
Washington Mutual	

Prior to the public hearing on the draft Housing Element, the document will be sent to the above organizations.

5.1.4 Definitions

Several terms are used throughout the Housing Element that have particular meanings under California law. The following presents definitions of key terms to facilitate understanding of the Housing Element. Words appearing in italics in a definition are defined elsewhere in this section.

Existing (Housing) Need — The unmet potential demand for affordable housing in a community; assumed to be the number of very low- and low- income households that are *overpaying* for housing (spending more than 30 percent of their gross income on housing costs).

Family — A *household* consisting of two or more persons who are related by blood or marriage or who constitute a single bona fide housekeeping unit.

Future (Housing) Need — New construction needed to provide housing for all income groups that will accommodate new households (growth), replace housing inventory lost to demolition or other causes, and achieve a vacancy rate that will allow the housing market to operate efficiently and provide mobility opportunities.

Goal — A statement describing the desired condition that should exist in the housing environment. A goal is typically not stated in quantitative terms, in contrast to an *objective*.

Household — All the persons who occupy a single dwelling unit, such as a detached house, townhouse, or apartment. A household may consist of one person, unrelated individuals, or a *family*.

Housing Production Needs See *existing need* and *future need.*

Objective The numerical target for some measurable outcome to be achieved by the end of the planning period (2005). Objectives must be stated for the rehabilitation, conservation, and development of housing.

Overcrowding A household living in a housing unit that lacks sufficient space to meet basic needs of daily living. It is measured by the ratio of persons to rooms in a housing unit (excluding bathrooms, kitchens, and halls). A unit is considered overcrowded if the number of persons exceeds the number of rooms.

Overpayment A household that is paying more for housing than it can reasonably afford, given other life necessities such as food, transportation, health care, and child care. The rate of overpayment is measured by the proportion of households spending more than 30 percent of their gross income on housing costs. The problem of overpayment by very low- and low- income is often cited as an indicator of housing assistance needs.

Policy A broad statement, consistent with a *goal*, that guides and shapes actions in order to achieve an *objective* under that goal.

5.1.5 Consistency with Other General Plan Elements

The proposed goals and policies of the Housing Element have been reviewed for consistency with the other elements of the updated General Plan. As a result, the Housing Element is internally consistent with the balance of the General Plan.

5.1.6 Format of the Housing Element

The Delano Housing Element is organized into four chapters in addition to this introductory chapter and the Executive Summary.

Section 5.2 includes a discussion of the appropriateness and effectiveness of the previously prepared Housing Element (adopted by the City Council in 1992), and the City's progress in implementing the goals and policies of the previous Element.

Section 5.3 provides a detailed analysis of housing needs, resources, and constraints in the City of Delano. Included in this analysis is an inventory of population, households, and housing characteristics, including an evaluation of housing affordability.

Section 5.4 sets forth an analysis of housing opportunities and constraints. The discussion of housing opportunities focuses on an evaluation of land available for the development of new housing within Delano. The discussion of housing constraints addresses those factors that serve as barriers to the construction of affordable housing. These include both governmental and market constraints to the production of housing.

Section 5.5 presents housing goals, policies, and action programs to address the housing needs of existing and future residents of the City. While goal and policy statements are general in nature, the housing programs are specific actions necessary to achieve the goals and policy statements adopted in principle. The City's quantified objectives for construction, rehabilitation, and preservation follow the discussion of housing actions.

5.2 PROGRESS REPORT

5.2.1 Introduction

Section 65588(a) of the Government Code requires that each city shall review its housing element as frequently as necessary to evaluate all of the following:

(1) The appropriateness of the housing goals, objectives, and policies in contributing to the attainment of the State housing goal.

(2) The effectiveness of the housing element in attainment of the community's housing goals and objectives.

(3) The progress of the city in implementation of the Housing Element.

The City of Delano's existing Housing Element was adopted in January 1992. Because of revisions to State law, a new update of the Housing Element was not required until 2002. The purpose of this Chapter is to evaluate the effectiveness of Delano's Housing Element, the progress in the implementation of the existing Housing Element, and the appropriateness of existing Housing Element goals, objectives, policies, and programs.

5.2.2 Appropriateness and Effectiveness of the Existing Housing Element'sGoals, Objectives, Policies, and Implementation Programs

This section evaluates the effectiveness of the goals, objectives, policies, and actions of the 1992 Housing Element. There were many factors that affected the City's ability to meet the goals and objectives it established in 1992, including the effects of an ongoing recession, the availability of State and Federal funding, and staffing needs. Since the adoption of the 1992 Housing Element, several programs and projects have been completed. Between 1992 and 2002, 2,467 dwelling units were issued permits for construction within the City.

The following provides a review of each action program defined in the 1992 Housing Element. The review summarizes the success or failure of each program. If a program was unsuccessful, a summary of the reasons has been provided.

a. Programs To Conserve And Improve Existing Housing

Code Enforcement. The existing Housing Element sets forth a code enforcement program to ensure the health and safety of the City's residents. No quantified objective was adopted. Since adoption of this program, the City of Delano has hired a new Code Enforcement Officer to aggressively identify and respond to complaints about substandard housing conditions. Violations are promptly identified

and action initiated to require property owners to correct the situation prior to issuing citations into court.

Recommendation. Continue the existing code enforcement program.

Neighborhood "Clean-up/Fix-up" Campaigns. This program is related both to the prevention of neighborhood deterioration through the encouragement of continued home maintenance and to the stimulation of housing rehabilitation activities. This program consists simply of the periodic designation of a "neighborhood clean-up/fix-up" day or weekend. The City sponsored these designated days to demonstrate the commitment of the public to the objective, and to encourage trash elimination, tree pruning, yard cleaning, fence painting, and similar minor fix-up activities. The City will cooperate with neighborhood groups, civic organizations, and others willing to assist in program publicity and to help the elderly and disabled, who might be unable to perform minor maintenance tasks themselves. Since the adoption of this program, the Police Department has staged three "City Pride" neighborhood clean up campaigns per year, where residents have been involved in cleaning up litter and debris, including large household discard items. A high level of resident interest and participation has been achieved in these efforts.

Recommendation. Continue the program.

Rehabilitation Programs – Owner and Renter Programs. Through Self Help Enterprises, a non-profit corporation, the City participates in a homeowner rehabilitation and reconstruction program. The program has been funded for $300,000 for two years, and third year funding in the same amount is pending. Supplemental funding is provided by the City's Redevelopment Agency. The eligibility limit for participating households is no more than 80 percent of the current regional income. Eight units have been funded for rehabilitation loans from the first year's funding, while additional funding applications are in process for subsequent years.

The City administers a rental rehabilitation loan program for low and moderate-income units. Funding is set for $500,000 per year over a two year span. This program has gone through its start up stage and inquiries have been made. No projects have yet been initiated. Funding for the owner and renter rehabilitation and reconstruction program is provided through a combination of federal Block Grant funding allocation, and federal HOME funds, which are allocated at the state level.

b. Affordability Conservation

Low-Rent Public Housing Program. This program is administered and carried out by local public housing authorities which develop, own, and operate low-rent public housing, which is subsidized by the U.S. Department of Housing and Urban Development (HUD). The Housing Authority of the County of Kern administers this program in the Delano area. The voters must authorize public low-rent housing in the State of California. The Housing Authority of the County of Kern is the regional agency authorized to construct publicly owned housing for the benefit of households in need within the City. The Authority is constrained in its ability to produce new units by the funding allocated by federal and state housing agencies. The Housing Authority has recently undertaken the conversion of approximately 15 agency-owned rental units into ownership status available for purchase by its

residents. In 2001, the City granted approval for an 84 detached unit rental project with community facilities, in the south part of the City. Construction is expected to begin within 1-2 years.

Recommendation. Continue the program.

Section 8 Rental Assistance. At the time of the 1992 Housing Element, a total of 209 households were assisted with Section 8 Rental Assistance. Of these 42 were for elderly households. The existing Housing Element calls for continued assistance to those 209 households. The Housing Authority of the County of Kern administered Section 8 certificates/vouchers for 25 households in Delano, of which 6 were elderly households, as of October 1992. Currently, there are 24 Section 8 vouchers in effect in the City of Delano. This includes nine vouchers for disabled households with Social Security income. The number of Section 8 vouchers in Delano has been consistent since 1992. The Housing Authority of the County of Kern is the implementing agency for both the voucher and agency-owned programs. The continued provision of certificates and vouchers to Delano households is dependent upon continued federal funding levels for this specific program.

Recommendation. Continue the program.

Rental Housing Production. This is one of several model programs under the National Affordable Housing Act of 1990. An allocation of HOME funds will be utilized by HUD to make repayable advances to public or private sponsors for up to 50 percent of the cost of construction, acquisition, or substantial rehabilitation of affordable rental housing.

Interest payments of up to 3 percent on the advances would start one year after project completion. Principal and any accrued interest are repayable from "surplus cash" (to be defined in regulations) on an annual basis.

HUD is to establish criteria to be used by participating jurisdictions to select projects. Specific requirements may include addressing a shortage of rental housing for lower income families in the area; the extent to which large families with children will be served; and/or the extent to which the project provides congregate services to the elderly or persons with disabilities, among others.

Since the adoption of the existing Housing Element, Redevelopment Agency funds have been used to develop the Jasmine Heights Apartment complex, which includes 128 rental units that are tied to income criteria, based on an agreement with the redevelopment agency and Casa Hernandez complex, which includes 80 senior citizen units, with an emphasis on farm workerfarm worker needs. Additionally, the State Tax Credit Allocation Program has been used to fund the Villa Santa Fe complex, which includes 81 family rental units that are either 3- or 4-bedroom units. This complex was approved in 2001 and is now under construction.

Recommendation. Continue the program.

Infrastructure Improvement Program. While the use of this program will be somewhat limited, funds could be used to assist in the preservation of neighborhoods by upgrading selected public

improvements. In order to meet the intent of the law, a nexus would be required linking the improvements to the preservation of housing units for lower and moderate-income households.

Recommendation. Implement/continue the program.

Compensating Balance Program. This proposed rehabilitation program is a traditional amortized loan program, the maximum loan amount being $15,000 per unit, but in no case exceeding more than 25 percent of the appraised value of the property. This bank program would be implemented in association with a lending institution and is known as a "Compensation Balance" program. This program is unique because it allows the Agency to leverage its residential housing set-aside funds to enable these loan funds to be borrowed at below-market rates and still replenish the initial original outlay of capital by the City of Delano Redevelopment Agency through the establishment of a revolving pool of funds.

Initially under this program, the Agency would establish an interest-bearing account or accounts, the amount to be determined by the Agency, at a qualified financial institution. Each time a loan is funded by the financial institution at an interest rate determined by the Agency, according to the yet to be established "General Program Guidelines," a specified percentage of the total loan amount is taken out of the interest-bearing account. The City/Agency bears no liability if a borrower defaults on a loan, since it is the financial institution that finally approves the loan and assumes the risk of recapturing its loan investment. The borrower will incur costs associated with normal loan processing charges.

Recommendation. Implement/continue the program.

Deferred Payment Loan Program. The Deferred Payment Loan (DPL) Program is designed so that lower-income, single family homeowners may borrow money for needed home repairs. No repayment, however, is made until the real property is sold, assigned or transferred or the financial situation of the borrower has improved. The term of the DPL is three years. When the term is near expiration, the borrower must go through a reapplication process to determine if he or she is still eligible under the "General Program Guidelines." If the borrower is still eligible, the DPL will be renewed for another three years and so on until there is a change in title to the property. If the borrower is no longer eligible for this program at the end of one of these three-year renewal terms, the borrower has the following options:

1. Pay off the loan balance in full.
2. Apply to the bank to borrow the necessary outstanding balance at the market rate for such a loan.
3. Arrange to borrow the money from a lender or source of his or her choice.

This program is structured to assist only lower-income participants and, unless a transfer of the property occurs, the Agency, depending on the circumstances of the loan, could have an interest in the real property for a period longer than 15 years. Both the Compensating Balance and Deferred Loan Program would require recordation of the appropriate interests in the subject properties.

Recommendation. Implement/continue the program.

Substantial Rehabilitation Loan Programs. This program is designed to cover those properties that have deteriorated to a point where the funding limit of the above-described rehabilitation loan programs is inadequate to cover the cost of needed repairs and rehabilitation. The costs of repairs to properties under this program would exceed 25 percent of the appraised value of the property and would be considered substantial rehabilitation under the provisions of California Community Redevelopment Law. Owner-occupied units rehabilitated under this program would be required to be available at affordable housing costs to persons and families of Very Low, Low, or Moderate Income for a minimum period of no less than 30 years or for as long as is feasible. These restrictions would have to be recorded, run with the land and be enforceable against the original owner and successors by the Agency. This requirement would be longer should the Agency consider a merger of its two redevelopment plans due to a recent change in State law.

Sales of owner-occupied units in this program, occurring prior to the expiration of the restricted period, would result in the Agency sharing in sales proceeds in excess of an Agency-adopted program. The substantial rehabilitation loan program would be available for lower and moderate income persons and would be administered as a deferred loan program, payable at the time of transfer of title or forgiven at the end of the restricted period.

Recommendation. Implement/continue the program.

Older Resident Rehabilitation Grant Program. Under this program, older residents identified as possessing Very Low and Low Incomes who are owner-occupants of single family housing units would be eligible for qualified home repairs and rehabilitation efforts. This would be a grant program, with no repayment to the Agency. The program would have a maximum grant limit of $2,500. Restrictions are related to program participant's income and would require a structural review of each real property to provide evaluation of total need and a subjective evaluation of additional referral services. This grant program is envisioned as a mechanism to allow seniors within the community to correct minor defects in their living environments and enhance the physical quality of their home environments. The use of a nonprofit community organization or organizations may be helpful in implementing this program.

Recommendation. Implement/continue the program.

Redevelopment Agency Rental Assistance Programs. The City of Delano Redevelopment Agency might own, lease or contribute the value of a piece of property in exchange for a certain percentage of units to be rented to Very Low and Low Income seniors or families. In addition, the Agency may want to issue multifamily mortgage revenue bonds, which would provide first trust deed monies at below market interest rates. In exchange for issuing the bonds, at least 20 percent of the units would have to be set aside for Very Low and Low-Income individuals or families.

In certain instances, the Agency might wish to rehabilitate existing rental housing units. Low-cost loans can be made to multifamily unit owners if said owners will reserve a certain number of units

for Very Low and Low-Income families. Variations of the rental housing programs can be developed should the Agency so desire.

Recommendation. Implement/continue the program.

Low Income Tax Credit Programs. The Low Income Tax Credit Program provides for a 9 percent annual tax credit for a 10-year period of time, based upon the total development cost (TDC). In other words, a developer can get a 90 percent return on its TDC investment if it agrees to lower and maintain rents at affordable rates as prescribed by the State Tax Credit Allocation Committee.

Recommendation. Implement/continue the program.

c. Assist in Low/Moderate Income Housing Development

Density Bonus Ordinance and Implementation. The existing Housing Element includes a program for adopting a density bonus ordinance. This ordinance was adopted by the City Council in 1990. The density bonus ordinance has been utilized several times within the City. In February1995, within the Almond Tree Village development, 69 density bonus units were approved. In April 1999, within a multiple family development near the intersection of 12th Street and Ellington 72 density bonus units were approved.

Recommendation. Implement/continue the program.

California Self-Help Housing Program. The California Self-Help Housing Program utilizes the self-help concept to assist families to build and rehabilitate their homes. The program consists of mortgage assistance for new construction and rehabilitation technical assistance may be available.

Recommendation. Implement/continue the program.

Supportive Housing for the Elderly. The HUD Section 202 program has been available for many years, primarily to build housing for seniors and to provide long-term rental subsidies for these units. Assistance to the elderly is given in the form of non-interest bearing capital advances and contracts for rental assistance. Assistance need not be repaid as long as the housing remains available for Very Low-Income households, which are those 50 percent below the County's median household income.

Recommendation. Implement/continue the program.

Mello-Roos and/or 1913 Act Programs. City of Delano Redevelopment Agency housing has set-aside funds, which could be utilized to reduce the cost of assessments or special taxes for a selected number of housing units designated for lower and moderate-income homebuyers within a new subdivision.

Recommendation. Implement/continue the program.

Infill Housing Write-Down Program. City of Delano Redevelopment Agency housing set-aside funds could be utilized as follows:

1. To purchase a selected number of lots from a developer or property owner for sale at a "below-market" price to qualified lower and moderate-income homebuyers.
2. To purchase completed homes from a developer for sale at a "below-market" prices to qualified lower and moderate-income homebuyers.

Recommendation. Implement/continue the program.

Mortgage Loan Interest Write Down Program. Through this program, the City of Delano Redevelopment Agency would use a portion of its housing set-aside fund to subsidize conventional mortgage interest rates for qualified program participants for a given period of time, thus making it easier for a homebuyer to qualify for a mortgage.

Recommendation. Implement/continue the program.

Tax Exempt Bond Program – Single-Family. The Tax Exempt Bond Program for single-family housing provides below-market mortgage rates for first-time homebuyers in certain income groups. This program can "take out" a developer from his construction loans and provide first-time homebuyers with affordable financing.

Recommendation. Implement/continue the program.

Tax Exempt Bond Financing – Rental Construction. Tax Exempt Bond Financing for rental construction is a developer-driven program. The purpose of this financing is to provide below-market "take out" financing for developers of affordable rental property. Basic requirements are that 20 percent of the units must be made affordable to lower and moderate income persons. Presumably, the remaining 80 percent can be at market rate, thus carrying the development. This type of financing has been made more difficult since the 1986 Tax Reform Act but the use of this program is still viable in some cases.

Recommendation. Implement/continue the program.

HUD Construction Program. Although HUD new construction programs are not at present strongly funded and take a minimum of two to three years to plan, if time is not a major consideration, a HUD new construction program (such as the Section 202 Program for the Elderly) may be a desirable program.

Recommendation. Implement/continue the program.

Equal Housing Opportunities Program. The Fair Housing Division is funded through the U.S. Department of Housing and Urban Development's Community Development Block Grant (CDBG) program and serves all of unincorporated Kern County and all CDBG non-entitlement municipalities. The State Fair Employment and Housing Department enforces fair employment and housing laws, educates the general public of its housing rights, and informs the public of the various courses of action which are available in the event of an alleged violation of fair housing laws.

The Kern County Fair Housing Division implements various outreach and marketing programs to inform the public of fair housing and to assist with housing-related problems where appropriate. The Division distributes 200 informational flyers per month to housing providers. The Division advertises its toll-free telephone number throughout the County; in 1992, the Division received over 4,200 telephone calls. The Division has prepared a housing resource guide containing information pertaining to all housing-related services provided throughout Kern County. The guides are "regionalized" and distributed throughout the various portions of the County.

Recommendation. Implement/continue the program.

d. Other Housing Programs

In addition to the preceding activities outlined in the existing Delano Housing Element, the City has undertaken a number of housing programs, which are described below.

Mortgage Credit Certificate Program. The Mortgage Credit Certificate (MCC) Program, authorized by Congress in the Tax Reform Act of 1984, is a means of providing financial assistance to "first time homebuyers" for the purchase of new or existing single family housing. The MCC Program provides qualified homebuyers with a Federal income tax credit. Income tax credits reduce an individual's tax payments by an amount equal to the credit. Under the MCC Program, the maximum tax credit available is equal to 20 percent of the annual interest paid on the borrower's mortgage.

In 1985, the State of California adopted legislation authorizing local agencies to make MCCs available in California. The MCC Program is a "non-cost" housing ownership program currently being utilized throughout the State. This program could be implemented through the utilization of City of Delano Redevelopment Agency housing set-aside funds. The authority of the MCC Program comes from the Federal Government. The MCC Program is easy to administer and is highly cost-effective in that it delivers a direct subsidy to a homeowner.

While the enabling legislation for the program potentially expires this year, many officials in Washington, D.C. feel it will be extended for at least another two years. While the tax credit authority comes from the Federal Government, the issuance of MCCs comes under the jurisdiction of the State. MCCs are allocated on a first-come, first-serve basis in California.

The chief advantage to the Redevelopment Agency would be that the cost of this program is a simple one percent deport fee placed with the State Mortgage Allocation Committee. For example, if the

Agency wished to subsidize 100 homes at $80,000, the cost to the Agency would be a deposit of $80,000, fully refundable upon origination of the certificates.

First-Time Home Buyer Loan Program. This program is designed to provide prospective homeowners with a matching down payment equal to the down payment of the borrower, not to exceed $15,000, through the utilization of City of Delano Redevelopment Agency housing set-aside funds. Applicants under this program must be fully qualified to make mortgage payments to the funding institution of their choice. Such payments, including principal, interest, taxes, association dues, repayment to the Redevelopment Agency, and other requirements must meet the lending criteria of the lending institution. The Agency contribution would assume a second position to the holder of the first lien and the Agency would be reimbursed if the dwelling were sold or transferred during the first 10 years of occupancy. No monthly payment would be due the Agency during the initial five years of the loan. Payment would be due to the Agency in the sixth year but only on 50 percent of the Agency loan. The other 50 percent would be forgiven if the dwelling remained occupied by the original owners for a minimum of five years. The Agency position and the amount of the monthly repayment schedule must be within the acceptable guidelines of the lending institution selected by the applicant. This program could be funded from the proceeds of a taxable note as the potential exists that note proceeds could be treated as a loan.

Silent Second Trust Deed Program. This program is similar to the First Time Home Buyer Loan Program except that the City of Delano Redevelopment Agency provides 100 percent of the required down payment and secures its position through a "silent" second trust deed. Depending upon the objective of the Agency, payback of the second trust deed can be postponed until the unit is sold, or a portion could be forgiven based upon the number of years the unit is occupied by the owner.

Homeless Shelter/Transitional Housing Zone Amendment. In order to accommodate any present and future needs of the homeless in Delano, the City of Delano will amend its zoning ordinance to allow for homeless shelters and transitional housing within General Services Commercial (G-S) districts. There is a sufficient supply of available sites within the existing G-S zoned areas in Delano. G-S districts are located within reasonable access to local community services, including government offices and transportation services, and will not require unusually high site development costs. The zoning ordinance will be amended to permit the development of, or conversion to, a homeless shelter or transitional housing without undue special regulatory approval.

Homeless Shelter/Transitional Housing Incentives. The City of Delano established administrative processing guidelines to encourage the development of, or conversion to, a homeless shelter or transitional housing through various reductions in development requirements and fees. The incentives to be available to qualified developers of homeless shelters and transitional housing projects will include reduced development impact fees, reduced parking requirements, and reduced utility connection fees.

Migrant Farm worker Housing. The special housing needs of many farm workers stem from the generally low wages and the instability associated with the agricultural industry. The northern Kern County area is economically based in agricultural production. Farm workers comprise a significant portion of Delano's population. In 1990, 2,697 Delano residents (35% of employed persons 16 years and older) were employed as farm workers, nearly all of whom are likely to have affordable housing needs

Due to the magnitude of the farming industry in the Delano area, large numbers of migrant farm workers are employed during the various harvest seasons. However, no migrant farm worker housing is available in the Delano area. The nearest migrant farm worker housing is located in the City of Shafter, approximately 20 miles southwest of Delano. This complex is owned and managed by the Kern County Housing Authority. In order to accommodate the housing needs of migrant farm workers, migrant farm worker housing should be established in the Delano area.

The Housing Authority of the County of Kern (HACK) would be the appropriate entity to establish migrant farm worker housing in the Delano area. HACK should investigate potential siting and funding for a migrant farm worker housing project in the Delano area.

5.3 NEEDS ASSESSMENT

5.3.1 Introduction

Section 65583(a) of the California Government Code requires the Housing Element to include an assessment of housing needs and an inventory of resources and constraints relevant to the meeting of these needs. The assessment and inventory must include the following:

(1) An analysis of population and employment trends and documentation of projections and a quantification of the locality's existing and projected housing needs for all income levels. These existing and projected needs shall include the locality's share of the regional housing need.

(2) An analysis and documentation of household characteristics, including level of payment compared to ability to pay, housing characteristics, including overcrowding, and housing stock condition.

(3) An inventory of land suitable for residential development, including vacant sites and sites having potential for redevelopment, and an analysis of the relationship of zoning and public facilities and services to these sites.

(4) An analysis of potential and actual governmental constraints upon the maintenance, improvement, or development of housing for all income levels, including land use controls, building codes and their enforcement, site improvements, fees and other exactions required of developers, and local processing and permit procedures. The analysis shall also demonstrate local efforts to remove governmental constraints that hinder the locality from meeting its share of the regional housing need.

(5) An analysis of potential and actual nongovernmental constraints upon the maintenance, improvement, or development of housing for all income levels, including the availability of financing, the price of land, and the cost of construction.

(6) An analysis of any special housing needs, such as those of the handicapped, elderly, large families, farm workers, families with female heads of households, and families and persons in need of emergency shelter.

(7) An analysis of opportunities for energy conservation with respect to residential development.

(8) An analysis of existing assisted housing developments that are eligible to change from low-income housing uses during the next 10 years due to termination of subsidy contracts, mortgage prepayment, or expiration of restrictions on use.

5.3.2 EMPLOYMENT AND POPULATION CHARACTERISTICS

a. Total Population

Between April 1990 and January 2000, the population of Delano increased from 23,467 to 39,489, an average of 1,602 persons per year (6.8 percent, annually). During the same period, the housing stock increased from 6,236 to 8,830 units, an average of 259 units per year (4.2 percent). The California Department of Finance estimates that population within the City of Delano was 40,292 and there was a total of 8,935 housing units in January of 2001. Table 5.3.A shows population and housing growth in Delano between 1990 and 2000.

Table 5.3.A - City of Delano Population, 1990 - 2000

	Population	Increase	Housing	Increase
1990	23,467		6,236	
1991	24,150	683	6,572	336
1992	25,800	1,650	6,786	214
1993	27,000	1,200	6,992	206
1994	31,350	4,350	7,220	228
1995	32,850	1500	7,371	151
1996	33,800	950	7,557	186
1997	35,250	1450	7,875	318
1998	37,150	1900	8,201	326
1999	37,850	700	8,411	210
2000	39,489	1639	8,830	419

Source: California Department of Finance, *City/County Population and Housing Estimates 1991-2000 with 1990 U.S. Census* and U.S Census. Data for 1990 and 2000 are from the U.S. Census; data from 1991 to 1999 is from Department of Finance.

b. Population Projections

The most recent growth projections adopted by the Kern Council of Governments (COG) indicates that population growth in Delano will be greater than occurred in the 1990s (1,602 persons annually or 6.8%). Kern COG's population projections show the City growing by approximately 3,668 persons annually through 2020, more than double the average annual population growth of the 1990s. Additionally, the City's population growth includes the growth of the prison population within the City. The number of housing units will also increase accordingly (930 housing units annually or 10.5 percent), as shown in Table 5.3.B.

Table 5.3.B - City of Delano Projected Population, 2000 - 2020

Year	Population	Housing
2000	39,400	8,830
2010	75,188	18,297
2020	112,750	27,436

Source: Kern Council of Governments, Regional Transportation Plan, 2000

c. Age Distribution

Understanding age distribution in the community is important because it affects the housing market. A declining number of young children can result in a change in the types of housing units being sought. Childless adults tend to have a higher combined income and prefer certain amenities, increasing the demand for condominiums or units in planned unit developments. An elderly population creates a demand for units with common recreation facilities and easy access to commercial, medical, and transportation facilities. Inflationary pressures within the housing market can create disadvantages for the elderly on fixed incomes.

It is typical that small rural communities, such as Delano, which are designed for and attract young families experience a particular demographic cycle. As the community matures, its school-age children grow up and begin forming their own households. Often, mature communities that emphasized single-family housing during their growth phases do not have a sufficient supply of housing that is affordable to these emerging households. Thus, a generation of new adults is sometimes forced to move away from its community in order to seek starter (often rental) housing.

In addition, such rural communities find that the types of housing that were well suited to families are not particularly well suited to seniors and empty nesters (non-senior adults whose children have grown and started their own households). Thus, seniors and empty nesters often look to sell their homes, and move into housing that is smaller and better suited to their needs. Sometimes suitable housing for such older adults is not available in the community where they made their homes, and they are forced to move to other areas. Typically, a new generation of young families moves into the community. School-age population increases, and the community once again has many young families in residence.

As noted above, not only does a community's demographic makeup change over time, so does its housing needs. If it is important to the community to retain its youth and elderly populations, it is important that a variety of housing types and styles of residential development be provided,

including rental and starter housing, as well as housing for young growing families, empty nesters, and the elderly.

In 2000, over one-third of Delano's population was under the age of 19, while 7.5 percent of the population was 65 years old or over (Table 5.3.C). This indicates that Delano is still within its "growth" stage, attracting young families. Population growth projections for the City indicate that this trend toward attracting young families will continue for the next 20 years.

Table 5.3.C - City of Delano Age Distribution, 2000

	City of Delano		Kern County	
	Number	Percent	Number	Percent
Under 5 years	3,537	9.1%	55,707	8.4%
5-9 years	3,711	9.6%	61,659	9.3%
10-14 years	3,396	8.7%	59,544	9.0%
15-19 years	3,321	8.6%	55,224	8.3%
20-24 years	3,481	9.0%	46,811	7.1%
25-34 years	6,689	17.2%	93,251	14.1%
35-44 years	6,010	15.5%	103,676	15.7%
45-54 years	3,617	9.3%	76,557	11.6%
55-59 years	1,144	2.9%	26,239	4.0%
60-64 years	1,019	2.6%	20,923	3.2%
65-74 years	1,578	4.1%	34,287	5.2%
75-84 years	997	2.6%	21,310	3.2%
85 years and over	324	0.8%	6,457	1.0%
Total	**38,824**	**100.0%**	**661,645**	**100%**

Source: 2000 Census

d. Ethnicity

Table 5.3.D provides the 1980, 1990 and 2000 Census breakdowns of the racial and ethnic distribution of the City of Delano by percentage of the population. As shown in the table, there are some differences in the way that ethnicity was tabulated in the censuses, primarily in the tabulation of "Hispanic." In the 1980 and 1990 Censuses, "Hispanic" was treated as an ethnic characteristic, separate from the racial characteristics being tabulated. Thus, in 1980 and 1990, "Hispanic" residents were also categorized as being a member of the "white," "black," "Native American," "Asian," or "other" race. In the 2000 Census, "white," "black," "Native American," "Asian," and "other" are treated as ethnicities. Thus, in the 2000 Census, "Hispanic" residents are not also categorized by race.

Table 5.3.D - City of Delano Ethnicity, 1980, 1990, and 2000

	1980		1990		2000	
	Number	**Percent**	**Number**	**Percent**	**Number**	**Percent**
White	6,750	40.9%	5,521	24.3%	10,157	26.2%
Hispanic	-	-	-	-	18,198	46.9%
Black (African American)	505	3.1%	534	2.3%	2,193	5.6%
Native American	134	0.8%	134	0.6%	352	1.0%
Asian, Pacific Islander	2,418	14.7%	4,903	21.5%	6,187	15.9%
Other Race	6,684	40.5%	11,670	51.3%		
Two or More Races	-	-	-	-	1,737	4.4%
Total	**16,491**	**100%**	**22,762**	**100%**	**38,824**	**100%**
Hispanic Origin (any race)	9,464	57.4%	14,214	59.3%	-	-

Source: 1980, 1990, 2000 Census

e. Employment Characteristics

The California Employment Development Department (EDD) identified the total labor force within the City of Delano as of February 2002 to be 12,780. The total employment was 8,960, which left 3,820 unemployed (29.9%). This percentage is not adjusted for seasonal farm worker unemployment. This percentage is typical compared to other farming communities within the San Joaquin Valley. For instance, McFarland had an unemployment rate of 34.5 percent and Arvin had an unemployment rate of 28.2 percent, as of February 2002. Communities within the San Joaquin Valley that do not rely on farming have lower unemployment rates that do not reflect the seasonal fluctuation. For instance, Bakersfield had an unemployment rate of 9.4 percent and Taft had a rate of 8 percent. Kern COG states that in 2000 there were 13,138 jobs within the City of Delano. The job projections for the year 2020 within Delano are 22,258, this is an increase of 456 jobs per year (or 3.5% increase per year). Thus, Delano's jobs-to-household ratio is projected to decrease from 1.52 in 2000 to 0.81 in 2020.

While the City's economy is heavily oriented towards agriculture, it is not solely dependant upon agriculture. The employment industries in the Delano area are very diverse. The EDD breaks down the employment statistics by Metropolitan Statistical Area (MSA). The City of Delano is included in the Bakersfield MSA. Table 5.3.E depicts the diversity of employment opportunities within the Delano area. The industry sectors of Government, Services, Trade, and Farming are almost even in the quantity of people that each industry employs.

Table 5.3.E - Industrial Employment in the Bakersfield MSA

Industry	Percentage
Farm	18.3%
Mining	3.4%
Construction	4.9%
Manufacturing	3.9%
Trade	18.7%
Finance, Insurance, Property	2.9%
Services	20.2%
Government	23%
Transportation	4.7%
Total	**100%**

Source: EDD, November 2001

In November of 1991, the City of Delano was officially designated as an Enterprise Zone by the State Department of Commerce. This designation will be in effect for a 15-year period. The Enterprise zone program provides numerous State and local incentives and benefits to businesses that expand or locate within the Zone during this period. Since receiving Enterprise Zone designation, the City has attracted several large businesses. These include North Kern State Prison, Sears Logistics Services, and Paramount Farms. These new businesses have created approximately 2,200 new jobs.

5.3.3 Household Characteristics

a. Average Household Size

The 2000 Census reports that there were 8,409 households in the City of Delano, with an average household size of 4.02. Of these households, it is estimated that 7,245 (86.2%) were family households, while only 912 households (10.8%) were individuals living alone. The balance of Delano's households were non-family households with more than one occupant.

Delano's existing population per household as identified in the 2000 Census (4.02) is high, relative to Kern County (3.03) and the Southern California region (3.13). Whereas Kern County's population per household is projected to decrease slightly from 3.03 to 2.63 by 2020, Delano's population per household is projected to increase from 4.02 to 4.11 by 2020. This is much higher than the County or the regional average, and indicates Delano's continuing popularity for families, including large families.

b. Income

The Kern COG 2000 Regional Housing Allocation Plan breaks the County into nine different planning areas. The City of Delano is included in Planning Area 3, which consists of census tracts 39, 40 through 44, and 46 through 50. Four incorporated cities are in the area Delano, McFarland, Shafter, and Wasco.

Planning Area 3 has the lowest family income of all the planning areas in the County. Median family incomes were more than $10,000 below that of Kern County as a whole. Table 5.3.F shows that low and very low-income families represent nearly 60 percent of families in Planning Area 3. This indicates that the City provides housing for a much higher percentage of low and moderate-income households than do other communities in the County. Table 5.3.F illustrates the differences in income distribution between the City of Delano and Kern County. The City currently provides its "fair share" housing for lower income households.

Table 5.3.F - Comparison of Area 3 and Kern County Household Income, Based upon 1990 Census Data

	Area 3		Kern County	
Median Family Income	$21,627		$31,633	
	Number	**Percent**	**Number**	**Percent**
Very Low Income <$15,826	4,573	33%	30,633	23%
Low Income $15,816-25,306	3,562	26%	23,301	17%
Moderate Income $25,306-37,690	2,583	19%	27,115	20%
Above Moderate Income >$37,690	3,152	23%	54,929	40%
Total	**13,870**	**100%**	**135,978**	**100%**

Source: 2000 Regional Housing Allocation Plan, Kern COG.

c. Housing Tenure

According to the 2000 Census, of the 8,830 households in Delano, 59.4 percent are owner-occupied, and 40.6 percent are renter occupied. Additionally, the City has a low homeowner vacancy rate of 1.1 percent.

d. Overcrowding

According to both California and Federal standards, a housing unit is considered overcrowded if it is occupied by more than one person per room (excluding kitchens, bathrooms and halls). Occupancy by more than 1.5 persons per room constitutes "severe" overcrowding. The incidence of overcrowding was significant in Delano, in 1990, with 42.3 percent of renter households and 25.1 percent of owner households defined as overcrowded. The 2000 Census states that the average household size is 4.02 and the average family size is 4.27. These are both much higher than the Kern County and regional averages. Factors contributing to the rate of overcrowding in Delano include housing costs, an increase in the number and proportion of large family households, and an inadequate supply of large family rental and ownership units. Overpayment of housing is an additional problem within the City. According to the 2002 Comprehensive Housing Affordability Strategy Report (CHAS Report), 1,647 renters and 786 owners overpay for housing within the very low-income household needs group.

As discussed in Chapter 5, the City of Delano is implementing several programs to lower the rate of overcrowding. These programs are designed to ensure available residential sites to meet the needs of the larger household, obtain grants to assist in housing large households, prioritize building inspections and funding opportunities, and increase the number of affordable housing units in the city, which will lower the occurrence of families doubling up within residential units.

e. Special Housing Needs

Disabled Persons. Disabled persons often have special housing needs. Depending on the type of disability, these may include close proximity to transit, retail and commercial services, and their workplaces. Other needs may involve modifications to the housing unit itself: ramps, lowered sinks, grip bars, and wider doorways. Curb cuts, ramps, and elevators in multistory buildings assist persons with walkers, crutches, and wheelchairs in gaining access to their living units, common areas, and the street. A variety of housing types, both rental and owner-occupied, should be made available that are suitable for disabled persons.

As of the time of this writing, 2000 census data on disabilities was not available. Delano had 2,583 residents aged 16 or over with disabilities in 1990, comprising 16 percent of Delano's 16 and over population. Of these 2,583 persons with a work disability and/or a mobility/self-care limitation, 1,283 were males and 1,300 were females. Based on the rate of population growth since 1990, the number of persons with disabilities in Delano today is probably close to 4,339. Table 5.3.G compares the percentage of adults in Delano who have a work disability or a mobility limitation to the same figures for Kern County as a whole.

Table 5.3.G - Persons With Work Disabilities or Mobility Limitations, 1990

	Delano		Kern County	
	Number	Percent	Number	Percent
Persons aged 16-64	13,268	100.0%	321,866	100.0%
With a work disability	1,207	8.5%	31,235	9.7%
Prevented from working	712	4.6%	18,172	5.6%
With a mobility limitation	327	2.2%	7,969	2.5%
Persons 65 and over	2,365	100.0%	51,060	100.0%
With a mobility limitation	414	30.6%	8,369	16.4%
With a self-care limitation	374	15.6%	5,840	11.4%

Source: 1990 Census

Single-Parent Households, Including Those with Female Heads of Household. The number of single-parent families, especially those headed by a female, has increased in recent decades. These families often have special housing needs, including a strong demand for affordable housing because of the income limitations of single-earner households. Of the 8,409 households within the City of Delano, 5,068 were married couple households (60.3%) and 1,547 were headed by single females (18.4%).

The Elderly and Households Headed By The Elderly. As of 2000, 7.5 percent of Delano's residents were age 65 or older. The percentage of older residents in Delano is lower than that of Kern County (9.4%). In addition, 1,982 or 5.4 percent of households, had an individual over 65 years old. Most of these individuals are living in owner-occupied housing units (70%), which is 19.7 percent of the total number of owner-occupied housing units in the City of Delano. Thus, 12.6 percent of the elderly are living in rental units. This percentage reflects 12.6 percent of the total rental housing within the City.

Housing affordability is an important consideration for the elderly, as they are typically on fixed incomes. Housing designed specifically for the elderly is typically made up of apartments with one or two bedrooms. Housing projects for the elderly are often constructed at higher densities than other types of housing, and often include some units designed for handicapped residents. The primary considerations in evaluating sites for elderly housing are proximity to shopping, social services, public transportation, and health care; compatibility with adjacent land uses; and cost. Secondary considerations involve proximity to recreation and churches, special amenities such as trees and views, and the absence of detrimental conditions such as traffic, noise, and industrial land use. There are two senior citizen rental projects in the City of Delano. These include the Cecil Avenue Apartments and the Cara Hernandez Apartments.

Large Families. According to 2000 Census data, Delano had 3,125 households consisting of five or more persons, representing 37.2 percent of the City's households. Table 5.3.H shows the number of households of different sizes in Delano. The share of large households (five or more persons) is considerably higher in Delano than the Kern County average, 18.8 percent. Among large families, the proportion that is renting is higher in Delano than it is Countywide (36.0% vs. 7.5%). This figure has increased from 30 percent in 1990. Delano, therefore, has a disproportionate demand for large rental units. Policies were established in 1992, as identified in Chapter 2, to encourage the development of 3+ bedroom units, since this policy was implemented, a total of 112 attached multiple family rental units with 3+ bedrooms have been issued permits for construction.

Table 5.3.H - Delano Household Size by Housing Tenure, 2000

Household Size	Owner Occupied	Renter Occupied	Total Households	Percent of Total Households
1	432	480	912	10.8%
2	905	558	1463	17.4%
3	722	614	1336	15.9%
4	932	641	1573	18.7%
5	797	496	1293	15.4%
6	552	282	834	9.9%
7 or more	653	345	998	11.9%
Total	**4993**	**3416**	**8409**	**100.0%**

Source: Census, 2000.

Group Quarters. In 2000, Delano had 5,057 residents living in group quarters, representing 13 percent of City residents. Of the residents identified as living in group quarters, 4,982 were identified as being "institutionalized." Those institutionalized include the population of the North Kern Correctional Facility and the Community Correctional Facility (CCF).

Farm workers. Agricultural employment continues to be a significant economic activity in Kern County. A precise count of the number of agricultural workers in Delano is currently unavailable due to seasonal and annual variation. However, the 1990 and 2000 Census demonstrates that the percentage of people living in Delano and employed as farm workers has declined. The 1990 census

identified 35 percent of residents 16 years and older employed as farm workers; while the 2000 census identified 25.8 percent (2,407) residents 16 years and older employed as farm workers.

Problems associated with farm worker housing typically include severe overcrowding and substandard living conditions. Specific programs identified in Section 5, Implementing Program 2.1.1, identifies grant programs for farm workers. There is typically a particular need for housing units that can accommodate large families.

The Kern County Housing Authority owns and manages six affordable housing complexes in the Delano area that accommodate farm workers. Complexes are located immediately outside of the City limits of Delano within the unincorporated area of Kern County.

Due to the seasonal changes in the farming industry, large numbers of migrant farm workers are employed during the harvest seasons. However, no migrant farm worker housing exists in the Delano area. The nearest migrant farm worker housing is located near the City of Shafter, approximately 20 miles southwest of Delano. This complex is owned and managed by the Kern County Housing Authority. In order to accommodate the housing needs of migrant farm workers in the Delano area, migrant farm worker housing should be established in the Delano vicinity. A housing program pertaining to the establishment of migrant farm worker housing in the Delano area by the Housing Authority of the County of Kern is included in this Housing Element.

Persons and Families in Need of Emergency Shelter. Due to the transient nature of the homeless, the precise number of homeless individuals in Delano is difficult to determine. Shelter assistance for the homeless is not available in Delano; however, there are several homeless shelters located in Bakersfield, approximately 30 miles south of Delano. No shelter beds, hotel/motel vouchers, or units of transitional housing are currently available in Delano.

Social service agencies located in Bakersfield include Kern Linkage, Bethany Services Bakersfield Homeless Center, and the Bakersfield Rescue Mission. Kern Linkage serves Kern County's mentally disabled homeless. Their assistance consists of information referral, case management, counseling, and a variety of other services to the homeless mentally ill.

The Bethany Services Bakersfield Homeless Center serves a large number of people from the Delano area. The Center provides over 12,000 meals monthly and provides shelter for up to 166 people daily. Overnight stays for a month or longer can be accommodated by the Center. The Center provides medical and dental care, clothes and supplies, and a school program for children.

The Bakersfield Rescue Mission serves single men and adult women. The Mission serves over 18,000 meals and sleeps 8,000 people per month. The Mission has a one-year program for people who are trying to make substantial changes in their lives. In this program the participants live in the Mission for one year and are provided both mental and physical assistance. The Mission provides for medical, dental, and nutritional needs; in addition to drug and alcohol classes, parenting classes, financial accountability classes, and job finding assistance.

Assisted Housing At Risk. State law requires an analysis and a program for preserving federally assisted housing developments eligible for conversion to market rents ("at risk" units). The purpose of this analysis is to identify programs that the City can implement to preserve federally assisted housing units that will prevent or minimize tenant displacement and will preserve the local affordable housing stock.

The following assisted housing projects within the City of Delano, are administered by the Housing Authority of the County of Kern. According to the Housing Authority of the County of Kern all of the listed projects will continue to be funded for the next ten years, therefore they will continue to retain their affordability.

Valle Vista: 62-unit complex was built in 1951 and consists of 10 one-bedroom, 34 two-bedroom, 12 three-bedroom, and 6 four-bedroom units.

Homer Harrison Homes: This 50-unit project was built in 1991 and consists of 46 three-bedroom and four-bedroom units.

Rancho Algodon: This 62-unit project was built in 1983 under the State's Rental Housing Construction Project (RHCP) and consists of 50 three-bedroom and 12 four-bedroom units.

International Village: This 54-unit Farmers Home Administration (FMHA) project was built in 1987 and consists of 32 two-bedroom, 18 three-bedroom and 12 four-bedroom units.

The following assisted housing projects within Delano, are administered by HUD. According to HUD and the individual property owners, all of the listed projects will continue to be funded for the next ten years, therefore they will continue to retain their affordability.

Delano Gardens: This 76-unit complex was built in 1972.

Valley View: This 90-unit complex was built in 1982.

Cecil Avenue Apartments: This 43-unit complex is specifically designed to meet the needs of senior citizens. The complex consists of 42 one-bedroom apartments and one two-bedroom apartment.

5.3.4 HOUSING CHARACTERISTICS

a. Housing Inventory

As shown in Table 5.3.I, the California Department of Finance identifies 8,667 dwelling units within the City of Delano. A total of 70 percent of these units are detached single-family homes. Over 14 percent are located in structures of five or more units. This mix reflects the community's small town character and agricultural heritage.

b. Housing Conditions

In March of 2000, a housing condition analysis was prepared for the City of Delano. All of the residential zoned parcels were surveyed and given a housing condition. Approximately 37 percent of

the residences were classified as needing little or no repair. Approximately 37 percent of residences were noted as needing very minor or only cosmetic repairs to maintain the unit. Units that needed moderate to major repairs or units that started to show significant deteriorating problems comprised approximately 20 percent of units within the City of Delano. Units that required an extensive amount of repairs or visible major structure problems represented 5 percent of the total dwelling units. There were only 50 units that were determined to be uninhabitable, which accounted for less than 1 percent of the total housing units surveyed.

Table 5.3.I - Composition of the Housing Stock, 2000

Housing Type	City of Delano		Kern County	
	Number of Units	Percentage	Number of Units	Percentage
Single Family, Detached	6,065	70.0%	154,615	65.9%
Single Family, Attached	257	3.0%	7,850	3.3%
2 to 4 Unit Structure	735	8.5%	21,061	9.0%
5 or More Unit Structure	1,223	14.1%	23,935	10.2%
Mobile Home	387	4.5%	27,026	11.6%
TOTAL	**8,667**	**100%**	**234,487**	**100%**

Source: California Department of Finance, *City/County Population and Housing Estimates*, January 1, 2000.

The dwelling units that require an extensive amount of repairs and those that were determined to be uninhabitable are primarily concentrated in two large regions. The first region is located just west of State Highway 99, between 11th Avenue and Garces Highway. The second region is located just east of State Highway 99, which also extends from 11th Avenue to Garces Highway. This second region is slightly larger, and there are more concentrations of deteriorating and dilapidated dwellings along the eastern side of State Highway 99.

c. Housing Cost and Rents

Housing costs in Delano are slightly lower than the Kern County average. According to the California Association of Realtors, the median price for a home in Delano in January 2002 was $89,000, compared to $97,250 Countywide. These figures are similar to comparable figures from the 1990 census. With conventional financing and current interest rates (about 7% on a 30-year conforming mortgage), the monthly payment on a $90,000 mortgage would be $599. Comparison with the figures in Table 5.3.J shows that moderate-income households, and even some low-income households, can afford the median home price in Delano.

Rental housing is often a lower cost alternative for lower-income households. Based on a review of newspaper advertisements, a two-bedroom apartment in Delano can be currently rented for $385 to $490 per month, with three-bedroom units now renting for approximately $450 to $570 per month. Allowing 30 percent of gross income for housing costs, a Delano household would have to earn $16,000 to $19,500 annually to afford the average two-bedroom rental unit and $18,000 to $23,000 to afford the average three-bedroom rental unit in Delano at current market rates. Thus, the average two-bedroom rentals are affordable to very low-income, three-member households, and the average three-bedroom rental is affordable to very low-income, four-member households. The above numbers reflect current market conditions within the City of Delano; they do not represent the future cost of housing within the City.

Table 5.3.J - Kern County Median Income and Income Limits by Household Size

	Household Size			
	1	2	3	4
County Median Income:	$28,200	$32,250	$36,250	$40,300
Income Group				
Very Low	$14,100	$16,100	$18,150	$20,150
Low	$22,550	$25,800	$29,000	$32,250
Moderate	$33,850	$38,700	$43,500	$48,350

Source: California Department of Housing and Community Development, *Income Limits*, January 2002.

5.3.5 EXISTING HOUSING NEEDS

a. Income Groupings

State law requires that housing needs be determined in such a way as to ensure that the shelter requirements of all income groups be identified, not just those household with incomes high enough to compete effectively in the private marketplace. Housing need is distributed into four income categories related to the County median household income: very low, low, moderate, and above moderate income (Table 5.3.K).

The terms "moderate income" and "low income" are commonly misunderstood as they apply to municipal housing elements. Moderate income is often thought of as applying to those with less than average incomes, and that, roughly translated, "moderate" income includes the "working poor" – those working people who are just above the poverty line. "Low" income, thus, is typically perceived as those who are below the poverty level. From these perceptions spring a wide variety of negative stereotypes. "Low income" residents are sometimes unfairly stereotyped as being unemployed, on welfare, and prone to crime. In short, they are often wrongly perceived as being an undesirable element in the community, rather than being working people.

However, as used in State housing law, "very low," "low," "moderate," and "above moderate" income are based on the *County's* median income: "moderate" income means average income for the County, and "low" income is simply below average. State law requires that four income levels must be considered in determining future housing needs. The income levels that are defined in relation to the median income in the county are identified in Table 5.3.K.

Table 5.3.K - Household Income Groupings

Income Group	Percent of County Median Income
Very Low	<50%
Low	50% - 80%
Moderate	80% - 120%
Above Moderate	>120%

The annual household income limit for each income group is determined by applying the above percentages to the Kern County median income, as reported by the California Department of Housing and Community Development. Because Kern County has a relatively low median household

income, a family of four with a household income of $32,240 to $48,360 is considered to be of "moderate" income, while a family of four with a household income of $20,150 to $32,240 is considered to be "low" income in Kern County. Table 5.3.K shows the median income and income limits for each income group for household of one to four persons in Kern County.

Because large numbers of households have two or more wage earners, it is often overlooked that many single-wage earner households often fall into low- or moderate-income categories. Thus, households with a single wage earner who is employed, for example, as a cook, file clerk, or bank teller, would likely fall into the very low income category. Similarly, households with a single wage earner who is employed as a teacher, truck driver, nurse or secretary would likely fall into the low income category, while a household with a single wage earner who is employed as a police officer, accountant, or engineer would likely fall into the moderate income category.

b. Housing Affordability

The monthly housing payment that a household is considered to be able to afford is determined by its household income. For purposes of housing affordability planning, a household is expected to be able to spend up to 30 percent of its monthly income on housing. Table 5.3.L shows the monthly payments that households in each income group within Kern County are able to afford. Table 5.3.M translates those maximum-housing payments into purchase prices for a four-person household.

Table 5.3.L - Affordable Monthly Housing Payment by Household Size

Income Group	Household Size			
	1	2	3	4
Very Low	$326	$403	$454	$504
Low	$564	$645	$725	$806
Moderate	$846	$968	$1,088	$1,209

Table 5.3.M - Housing Affordability in Kern County for a Household of Four

Income Category	Purchase Price at 7% Interest Rate	Monthly Rent
Very Low ($20,150 or less)	Less than $75,755	Less than $504
Low ($20,150 - $32,250)	$75,755 - $121,148	$504 - $806
Moderate ($32,250 - $48,350)	$121,148 - $181,722	$806 - $1,209
Above Moderate (More than $48,350)	More than $181,722	More than $1,209

The criteria defined for ownership affordability assumes one-third of annual income is available for housing, less 10 percent of housing cost for taxes and insurance, a fixed-rate 30-year mortgage at 7 percent interest. Rental housing affordability assumes a two-bedroom apartment and that 30 percent of annual income is available for payment of annual rent.

As can be seen from these tables, because of Kern County's relatively low median income, housing that is affordable to "lower income" groups has relatively low sale prices and rental rates. For example, a new home that is offered for sale at $130,000 in Delano is considered to be affordable to a moderate-income household, while a rental unit offered for $600/month is considered to be affordable to a low-income household. Thus, within Delano, the housing market is producing new,

four-bedroom homes at prices that are affordable to moderate-income residents. In addition, the housing market is producing rental units that are affordable to low-and very low-income residents.

However, there is still an affordability issue facing the City of Delano. The 2000 Census demonstrates that 35.7 percent of home owners and 44 percent of renters within the City of Delano are paying more than 30 percent of their gross income on housing costs.

5.3.6 FUTURE HOUSING NEEDS

a. Regional Housing Needs

Section 65584 of the Government Code requires that the appropriate council of governments determine each locality's share of the region's existing and future housing needs. Kern COG, which is responsible for cities and unincorporated areas within Kern County, adopted a Regional Housing Allocation Plan in May 2001. This document identifies future housing needs through the Kern COG region. "Future housing need" is defined as the number of additional housing units that are needed to meet projected increases in the number of Delano households between 2000 and 2007 to:

- Accommodate projected growth in the number of very low, low, moderate, and above moderate income households;
- Compensate for housing demolitions and other inventory losses; and
- Achieve a vacancy rate at the end of 2007 that allows the market to operate efficiently (4 to 6%).

According to Kern COG, Delano's projected need for new housing construction between 2000 and 2007 is 1,628 units. This projected need of 1,628 units represents a much larger growth rate than has historically occurred within the City of Delano. The vast majority of these units are needed to accommodate growth in the number of households; less than 5 percent is needed for each of the purposes of compensating for housing units that have been lost and maintaining a vacancy rate which facilitates choice in the housing market. Table 5.3.N shows the housing need for each income category, as determined by Kern COG.

Table 5.3.N - Housing Needs by Income Category, 2000 - 2007

Income Category	Number of Units	Percentage
Very Low	374	23%
Low	277	17%
Moderate	326	20%
Above Moderate	651	40%
Total	**1,628**	**100%**

Source: Kern COG, 2000 Regional Housing Allocation Plan.

b. Avoidance of Impaction

State housing law requires that in allocating future housing needs by income level, the local Council of Governments (Kern COG) avoid further "impaction," which is the concentration of lower income

households. Cities with a percentage of lower income households that is higher than the regional average are called "impacted" jurisdictions. Kern COG's Regional Housing Allocation Plan deals with the "avoidance of impaction" within cities by reducing projected needs for housing affordable to lower income households and increasing projected needs for housing units that are affordable to higher income households that are allocated to impacted jurisdictions. The opposite adjustment is made in the allocation to non-impacted jurisdictions.

According to Kern COG's assessment, 59 percent of Planning Area 3 households are in the very low- and low-income categories. By comparison, in Kern County as a whole, 40 percent of households are in these categories. Regionally, the figure is 25 percent. Thus, Delano is impacted as defined in State law. As shown in Table 5.3.N, 40 percent of Delano's identified new housing needs were allocated by Kern COG to Delano to very low- and low-income households.

c. New Housing Already Constructed

Since the beginning of the period covered by the Regional Housing Allocation Plan (April 2000) through the end of February 2002, 326 housing units for moderate-income households and 133 units for low-income households have been constructed in the City of Delano. The affordability of these new dwelling units and remaining housing needs are presented in Table 5.3.O. The numbers listed in Table 5.3.O are based on the average sales price compared to income. Housing sales prices were determined by estimates from City building records, anecdotal information, and, when provided, information from developers at the time of sale. The 326 housing units for moderate-income households being constructed meet the needs of low and moderate-income groups, with a range of purchase price from $82,950 to $149,950. All of the 133 units are apartments within multifamily residential structures and have been constructed. They meet the needs of the low-income group. As stated previously, two- and three-bedroom apartments in Delano can be rented for approximately $385-$570 per month. Because of Kern County's relatively low median income, a rental unit offered for $600/month is considered to be affordable for low-income households and thus the rental rate of these 133 apartments is affordable for low-income households.

Table 5.3.O - Remaining New Housing Construction Needs as of 3/1/2002

Income Group	Housing Need	Units Constructed	Remaining Need
Very Low	374		374
Low	277	133	144
Moderate	326	326	0
Above Moderate	651		651
Total	**1,628**	**459**	**1,169**

5.4 HOUSING RESOURCES AND CONSTRAINTS

5.4.1 INTRODUCTION

Chapter 5.4 contains data and analysis pertaining to the resources and constraints affecting the maintenance, improvement, and development of housing in Delano. The analysis focuses on four major topics:

- Availability of sites for residential development (vacant land study/developable acres).
- Potential and actual governmental constraints on housing (e.g., land use controls, fees, etc.).
- Potential and actual non-governmental constraints on housing (e.g., land prices, construction costs, and the availability of financing).
- Opportunities for energy conservation with respect to new development.

5.4.2 AVAILABILITY OF SITES FOR RESIDENTIAL DEVELOPMENT

a. Physical/Environmental Constraints

Areas of Steep Slopes. Landslides and slope stability do not affect the City of Delano since it is flat in topography.

Fault Zones. No faults have been mapped immediately near Delano, but several major faults can be found in Kern County. Therefore, the City is not designated in a special study zone under the Alquist-Priolo Act.

Agricultural and Open Space Issues. In general, most of the area within the existing City limits is not in agricultural production. Some agricultural parcels in unincorporated lands surrounding the City are currently under Williamson Act contract, which precludes their development until such time as the contracts expire.2

b. Inventory of Land Suitable for Residential Development

State law requires that an inventory of lands that are suitable for the development of housing be undertaken in the resources and constraints portion of a community's Housing Element. The objective of this analysis is to demonstrate that the community is capable of accommodating its "fair share" of regional housing growth, as expressed in the Regional Housing Needs Assessment.

As shown in Table 5.4.A, currently residentially zoned property within Delano's City limits has the capacity for 1,393 additional housing units. As previously noted, Kern COG's Regional Housing Needs Assessment indicates that there is a remaining need for 1,169 dwelling units within the City of Delano through the end of this Housing Element period (2005), as shown in Table 5.3.O.

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2 Contracts are for a ten-year period and are automatically renewed each year unless a notice of non-renewal is filed with the managing governmental agency. In that case, the land use restrictions remain in effect until the remaining nine years of the contract have elapsed.

Table 5.4.A - Development Potential of Vacant Lands that are Currently Zoned Residential

Residential Land Use Category	Current Zoning	Acres	Existing General Plan	
			Density (Dwelling Units/NET Acre)	Housing Capacity
Estate Residential	Residential Rural	160	1/2.5	40
Low Density	Residential Low	31	5	155
Medium Density	Residential Medium	3	7	21
Medium-High Density	Residential Medium/High	18	21	378
High Density	Residential High	23	29	667
Specific Plan	Specific Plan	120		480
TOTAL		**343**		**1,382**

Density and capacity of rural parcels are expressed based on maximum allowable development potential. The actual build out of these areas depends on the specific physical characteristics of individual sites.

As indicated in Table 5.4.A there are 23 acres of vacant land that is designated high density. It is important to note that the 23 acres are broken down into 8 parcels. The sizes of these parcels range from 18 acres to 0.14 acre and the number of units that can be developed on each parcel ranges from 522 units to 4 units.

Table 5.4.B identifies the vacant land that has a potential for zone change increasing the acreage available for housing existing in the Delano City limits. These areas have the ability to be rezoned and utilized to increase the land availability for very-low and low-income households.

Table 5.4.B - Vacant Land for Potential Zone Changes

Current Zoning	Potential Zoning	Acres	Density	Housing Capacity
Limited Manufacturing	Medium density	19	7 du/acre	133
Community Retail Center	Medium density	20	7 du/acre	140
Limited Commercial	Medium density	23	7 du/acre	161
Professional Office	Medium density	4	7 du/acre	28
Neighborhood Convenience	Medium density	2.4	7 du/acre	17
Total				**479**

The City is evaluating three potential annexation sites. Of these sites one is currently developed, with a 56-unit duplex project constructed by the Kern County Housing Authority, and a tract of 125 homes affordable to moderate-income households. At the time of development, about 20 years ago, this tract was allowed to develop without annexing into the City of Delano, although the City does provide water and sewer services to this area.

Annexation of this site would increase the supply of low and medium housing units within the City by 180 units. This would not result in the production of new housing units, but existing residents could benefit from City maintenance services. Also, existing homeowners and tenants could then become eligible to participate in City administered housing rehabilitation loan programs financed through the City's participation in Block Grant programs and HOME funds.

Table 5.4.C identifies the anticipated breakdown of housing by economic group that would result from build out of the existing Delano City limits. This breakdown is based on the following criteria.

- Rural density housing will likely be affordable only to above moderate-income households.
- Most low-density (single-family) housing will also be affordable to above-moderate income households, but some (30 percent) will be affordable to moderate-income households. This appears to be a conservative estimate, since the median home price in Delano is $89,000. As shown in Table 5.3.M, a four-person family at the upper end of the low-income range in Kern County can afford up to a $104,823 home, and a family in the moderate-income range can afford up to a $157,235 home. Delano Redevelopment Agency offers programs to assist first time in the very low- to moderate-income households. The Down Payment Assistance program is useful for those households, which may not otherwise be able to afford to accumulate sufficient income to afford a house. Also, FHA and VA loans are available at a lower interest rate and smaller down payments, which would, in turn, increase the mortgage. Other programs that help first time home buyers include density bonus given to developers within new housing tracts, which allow developers to construct smaller units to attract the first-time buyer.
- Medium and medium-high density housing will be affordable to primarily low- and moderate-income housing. This type of attached dwelling unit with zero lot lines substantially reduces the cost of the home as compared to the typical detached single-family home.

Table 5.4.C - Distribution of Housing Affordability by Residential Density

	Estate	Low	Medium / Medium-High	High	Specific Plan
Very Low				50%	
Low			30%	40%	50%
Moderate		30%	50%	10%	50%
Above Moderate	100%	70%	20%		

Table 5.4.D, below, shows that by applying these criteria, Delano can meet its need for low- and moderate-income housing using available capacity under existing zone within the City limits. The Specific Plan is currently producing new homes ranging from about $80,000 for 3-bedroom models to $147,000 for a two-story, 3- or 4-bedroom model. Based on these price ranges, it is estimated that about 50 percent of these new single-family homes are affordable to low-income households, and 50 percent are affordable to moderate-income households. No new models are priced at $157,000 or higher, which is the threshold for above-moderate income households as indicated in Table 5.3.M.

Within the current City limits, there is a shortage of land for very low-income households. The development capacity numbers in Table 5.4.D are an accurate portrayal of the quantity of units that can be developed on vacant lands within the City of Delano under the current zoning ordinance. The density used to calculate the development capacity is net acres, which includes any infrastructure improvements required to the vacant parcels.

Table 5.4.D - Distribution of Available Development Capacity within the City of Delano (based on 2000 General Plan)

	Very Low	Low	Moderate/Above Moderate	Total
Estate			40	40
Low			155	155
Medium/Medium-High		189	189	378
High	154	123	31	308
Specific Plan		240	240	480
Total	**154**	**552**	**655**	**1,366**
Remaining Need (per Table 5.3.O)	374	193	602	1,332
Surplus/ (Deficit)	-220	359	53	

In addition, the City of Delano allows for homeless shelters in residential zones R-2, R-3 and R-4 multiple family zones and are subject to the approval of a Conditional Use Permit. Transitional housing for the homeless can be placed in all motels, hotels, and churches. Farm worker housing is permitted in R-A, R-2, R-3 and R-4 zones and also requires a Conditional Use Permit, per Section 20.12 of the Zoning Ordinance. The Conditional Use Permit procedure is identical to the Conditional Use Permit review required for second units on single-family lots; or for more than one single-family and/or multi-unit structure in the R-2, R-3, and R-4 zones requiring Conditional Use Permit approval.

Essentially, the Conditional Use Permit procedure in multiple-family zones is the same as a site plan review process whereby the City reviews the proposal for compliance with City standards and adequacy as to building setbacks, parking landscaping and development standards set forth in the zoning ordinance. No differentiation in procedures or standards is made as to whether the residential proposal is multiple-family, more than one single-family structure on a parcel, designated farm worker housing, emergency shelter, or transitional housing.

The City is in the process of an ordinance amendment that would re-designate the conditional use permit procedure in multiple-family zones as a "site plan review" process. The focus of the new procedure would not be on a discretionary review of permitted uses, but would center on encouraging an effective and attractive design for projects. There would be no difference in architectural or design standards applied to farm worker housing, transitional housing and homeless shelters as compared with standard apartment residential construction.

In an attempt to minimize governmental constraints on housing for persons with disabilities, the City of Delano allows for group homes for persons with disabilities in all residential zones. Delano requires development pursuant to the Uniform Building Code, and does not maintain additional building requirements that would hinder the development of housing for disabled residents. Also, the City facilitates the development of housing for persons with disabilities by being able to waive development standards for ADA retrofit projects.

c. Limits to Physical Expansion of the City of Delano

The ultimate limits to Delano's legal boundaries and urban expansion within its Planning Area are dependent upon local political factors and geological characteristics.

The City of Delano is surrounded by lands that are currently under County jurisdiction. Only some of this land is suitable for annexation.

Delano's Sphere of Influence, established by Kern County's Local Agency Formation Commission (LAFCO) marks the City's projected ultimate boundary. The Sphere of Influence is primarily a planning tool that helps communities and public agencies project future service needs. The City has no direct land use control within those portions of the Sphere of Influence that are outside of the City limits.

The existing City Limit of Delano includes 6,467 acres (10.1 square miles). The City of Delano has an urban area boundary, this is the ultimate development boundary for the community and the area in which the City may comment on development proposals which are proposed by the County, and it is the potential annexation area for the community. The Urban Boundary Element of the Delano General Plan has several policies to control and direct growth. The City of Delano has adopted the following policies:

1. First priority shall be given to development of vacant, underdeveloped, and/or redevelopable land where urban services are or can be made available. Parcels should be substantially contiguous to existing development.

2. Identify and use natural and man-made edges, such as local roadways, as urban development limits for growth phasing lines.

3. Utilize low density and estate residential land uses as a buffer and transition between long-term agricultural uses and high-density urban development.

4. Prohibit the premature conversion of agricultural lands where agricultural preserves are present.

5. Encourage the use of parks and open space to enhance gateways to the City.

5.4.3 LAND USE CONTROLS

The City of Delano exercises a number of land use controls that directly affect the development of housing. Some of these programs place certain restrictions on housing development, while others encourage housing production. It is the purpose of this section to evaluate the extent to which these standards may facilitate or hinder the development of housing for all economic segments of the community.

a. Density Bonus

The City adopted a density bonus ordinance in accordance with the existing provisions of State law. The ordinance provides for a 25 percent density bonus for housing development that will meet one of the following qualifications:

- Housing Development for Lower Income Households: At least 20 percent of the units must be for lower income households.

- Housing Development for Very Low Income Households: At least 10 percent of the units must be for very low-income households.
- Housing Developments for Senior Citizens: At least 50 percent of the units must be for qualifying senior citizen residents.

The ordinance states that a development will be given either a density bonus of 25 percent over the otherwise maximum allowable residential density under the General Plan and zoning ordinance or the City will provide other incentives of equivalent financial value based upon the land cost per dwelling unit. Density bonuses are negotiated on a case-by-case basis between the City of Delano and the developer. Where a development meets these qualifications, the ordinance requires the City to provide at least one other regulatory concession and/or incentive, unless a finding is made that the additional concession and/or incentive is not required to provide the affordable housing.

b. Development Requirements

The City of Delano's requirements for off-site improvements are standard for small communities within Kern County. The off-site improvements within and adjacent to housing tracts include standard street widths, curbs, gutters, and sidewalks and are in compliance with standards as defined in the General Plan Circulation Element and the City's Municipal Code. Water and sewer lines from the development are required to be connected to the nearest city water and sewer main lines. Within the City of Delano there are no infrastructure issues that would hinder residential development. Required on-site improvements for residential development are determined largely by the zoning of the property. There are four basic residential zoning districts in the City of Delano, corresponding to General Plan land use designations:

- Estate Residential;
- Low Density;
- Medium Density; and
- High Density.

The Zoning Ordinance establishes lot dimension and setback requirements for structures in each residential zoning district. The required front setback is 20 feet to the garage and 15 feet to the front of the house. Table 5.4.E shows the Zoning District Development Standards for Residential Zones in the City. Table 5.4.F shows the Zoning District Development Standards for Commercial Zones in the City. Table 5.4.G shows parking requirements for residential units as established by the Zoning Ordinance. Delano's requirements for on-site improvements as expressed in the Zoning Ordinance are typical of California communities, and are not considered to be unusually restrictive as a constraint on the development of housing.

Table 5.4.E - Zoning District Development Standards (Residential Zones)

Land Use Activity	Rural R-A	Low R-1	Low R-1-5	Medium R-2	Medium/High R-3	High R-4
Maximum Units Net/Acre	1du/2.5ac	5 du/ac	6 du/ac	7 du/ac	21 du/ac	29 du/ac
Lot Area (sq. ft.)	108,900	6,000	6,000	6,000	6,000	6,000
Lot Area per Dwelling Unit	108,900	6,000	5,000	3,000	2,000	1,500
Lot Width (feet)	200	60	50	60	60	60
Front Setback Main Structure (feet)	25	15	15	15	15	15
Front Setback Street Facing Garage (feet)	25	20	20	20	20	20
Rear Setback (feet)	25	10	10	10	10	10
Side Setback (each)	25	5	5	5	5	5
Side Setback (street side)	25	10		10	10	10
Structural Parcel Coverage (maximum)	20%	30%	30%	60%	65%	70%
Distance Between Main Structures (feet)	N/A	N/A	N/A	20	20	20
Distance Between Accessory Structures (feet)	5	5	5	5	5	5
Main Building/ Structure Height (Maximum)	50 foot Rural, 30 feet all other zones					
Accessory Building/ Structure Height (Maximum)	50 foot Rural, 16 feet all other zones					

Table 5.4.F - Zoning District Development Standards (Commercial Zones)

Land Use Activity	Limited Commercial C-2	Community Retail Commercial C-R-C
Maximum Allowable Height	Fifty (50) Feet	Fifty (50) feet
Minimum Building Site Area	N/A	No less than 10 acres
Minimum Width Requirement	Fifty (50) Feet	Fifty (50) Feet
Maximum Building Site Coverage by Building or Structures	No Requirements provided that all yard, setback, parking, loading and landscaping requirements are met.	One hundred (100) percent except for parking, yards and landscaping requirements.
Minimum Yards Required	Front Yard – not less than fifteen feet Side Yard – no side yard required Rear Yard – no rear yard required	N/A
Fences and Walls	Not required unless it is adjacent to "R" District	Required when adjacent to residential or agricultural purposes.
Off-Street Parking Required	Retail - 1 parking space for each 300 square feet of net floor area. Churches – 1 space for every 4 seats. Hotels & Motels 1 space for every room.	Retail - 1 parking space for each 300 square feet of net floor area. Churches – 1 space for every 4 seats. Hotels & Motels 1 space for every room.

*Transitional housing for the homeless can be placed in all motels, hotels, and churches, which are permitted in C-2 and C-R-C Commercial Zones.

Table 5.4.G - Residential Off-Street Parking Standards

Residential Type	Off-Street Parking Standard
Single-family detached	2 spaces w/one a garage
Mobile home parks	2 spaces for each unit
Multifamily residential	One and one-half parking spaces per dwelling unit

c. Building Codes

Building codes are not a serious constraint to residential development. Building inspections in Delano are conducted by the City's building inspectors, for approval of new construction for occupancy, and to respond to specific complaints. New construction is required to meet the standards of the Uniform Building Code, which was last revised in 1997.

d. Minimum Size Requirements for Dwelling Units and Rooms

The City of Delano maintains minimum size requirements for dwelling units. There are no local amendments added to the Uniform Building Code. The minimum size for dwelling units is measured on the outside of walls, and excludes basements, garages, carports, exterior courtyards, and porches. These are modest requirements and are substantially smaller than what is currently being produced in market rate housing. Minimum dwelling unit sizes are as follows.

- Single-family detached homes: ..... 800 square feet
- Dwelling units within a multifamily structure:
  - 1 Bedroom ..... 650 square feet
  - 2 Bedrooms ..... 800 square feet
  - For each additional Bedroom in excess of 2 ..... 120 square feet

"Efficiency" apartments (450 square feet) are permitted in areas designated in the General Plan for "Medium," "Medium High," and "High" density residential development.

The City's minimum room size standards are as follows:

Room	Minimum Room Size
Bedroom	100 square feet
Full bath (tub, toilet, and lavatory)	50 square feet
Three-quarter bath (stall shower toilet, and lavatory)	35 square feet
Half bath (toilet and lavatory)	25 square feet

These standards are modest, and do not unreasonably add to the cost of housing within the City.

e. Mobile Home and Manufactured Housing Development Standards

The City of Delano permits manufactured dwellings to be used as single-family residences outside of designated mobile home parks if the home is certified under the National Mobile Home Construction and Safety Act of 1974, and if it meets the following standards:

- Front yard. No building structure or vehicle, except a recreation building, erected on or moved onto a lot shall have a height greater than one story or which exceeds 15 feet.
- Rear yard. There shall be a rear yard depth of not less than 5 feet, or 15 feet when adjacent to any residential zone.
- Roofed area. The total roofed area including mobile home and accessory buildings or structures shall not exceed 60 percent of the net area of the lot.
- Side yard. There shall be a side yard of at least five feet on both sides, or 15 feet when adjacent to any residential zone.
- Access. The subdivision shall have at least two means of ingress or egress leading to a public street.

These standards permit the placement of mobile homes that comply with federal HUD standards to be sited on single-family lots upon permanent foundations. The intent of the ordinance is to ensure that mobile home units are structurally safe and conform to (but not to exceed) the design standards of the neighborhood.

f. Second Dwelling Units

Within Rural (R-A), Low (R-1, R-1-5), and Medium (R-2) density residential zoning districts, the City permits an additional dwelling unit to be sited on a parcel subject to approval of a Conditional Use Permit and the following standards:

- The conversion of a portion of a single-family unit whereby cooking facilities are not shared in common.
- The addition of a separate unit onto the existing single-family unit.
- The creation of a separate detached unit on the lot or parcel in addition to the existing single-family unit.
- A detached mobile home or manufactured housing unit may be used as a second unit provided it is placed on a permanent foundation and meets all the requirements of Division 3, Chapter 7 of the Delano Zoning Ordinance.
- The second unit shall clearly be a subordinate part or accessory to the existing single-family dwelling located on the lot or parcel. The second unit shall not be more than 60 percent of the existing single-family dwelling nor shall it ever exceed 1,200 square feet in size or contain more than 2 bedrooms. The minimum size for a second dwelling unit is 300 square feet of living area.
- The second unit must maintain the scale of adjoining residences and blend into the existing setting by use of appropriate building form, height, materials, colors and landscaping appropriate to that setting.
- No more than one second unit may be created within a single-family dwelling.

- One additional paved off-street parking space shall be provided for the second unit, which is in addition to the off-street parking requirements for the principal single-family home.
- The additional dwelling is required to be metered separately from the main unit for gas, electricity, and water/sewer services.

g. Processing and Permit Procedures

Development review also affects housing costs. Because of holding costs, the longer it takes for a development proposal to be approved, the higher the development costs. For ministerial permits there is a site plan check by the senior planner. Additionally, a plan check and fee assessment by the Building Inspector takes place. This process typically takes less than 30 days. In the City of Delano, an application for a residential project containing about 20 units typically requires a processing time (from filing of the initial application to Final Map approval) of 90 to 120 days. However, actual processing time varies according to the size and scope of the project, as well as the time taken by the developer to prepare the final map, improvement plans, and other project-related documents. While the City attempts to process development applications in a timely and efficient manner, some delays are outside the control of the City. Delays in processing can occur if environmental review, pursuant to California Environmental Quality Act (CEQA), requires an EIR to be prepared. At times, approval from State or other agencies may also be required for certain types of projects. The typical application procedure for both single and multi-family residential units is as followed:

Single-Family Dwellings:

- Floor plans, construction plans and Site or Plot Plan is submitted to the Building Permit Technician with a $100 plan check fee deposit.
- Site Plan is sent to Planner for Zoning compliance review; either stamped approved or sent back for corrections.
- Approved site plan is sent to Building Division; after corrections are submitted and approved, the technician collects and verifies payment of school fees, development impact fees per Ordinance, utility connections, and issues construction permit upon payment of permit fees.
- Permit is valid for six months, if no work commenced and inspections requested, the permit approval expires and re-application and issuance of new permit is required if work is to continue.

Multiple-Family (attached) Dwellings:

- Construction and Site Plans are submitted to the Building Permit Technician with a $250 plan check fee deposit.
- Prior to plan check, the proposal is sent to Planning to determine CEQA status; if not exempt, an Initial Study is generally required for projects containing more than six units or two or more residential structures.
- A conditional use permit is required in all R-2, R-3 and R-4 zones for residential projects containing more than five units in a single structure or more than one structure.
- Project plans are circulated to all City departments and County Fire Department.

- Planning Commission approval or denial, or any condition of approval or environmental determination, may be appealed to the City Council upon payment of an appeal fee.
- Total processing time for a conditional use permit without an appeal is generally one to two months.

5.4.4 GOVERNMENTAL FACTORS

a. Funding Availability

The City of Delano does not have the financial resources or sufficient staff to undertake major housing assistance programs without substantial backing by Kern County, the State, and Federal agencies. Existing funding for Federal and State programs is not sufficient to meet Statewide demand, which, in turn, limits the City's ability to meet its needs. Therefore, the limitations on availability of outside assistance programs acts as a constraint to the provision of affordable housing.

b. Public Services and Facilities

The provision of public services (especially water, sewers, and flood control) does not constrain the production of new housing below the number projected by the current Regional Housing Allocation Plan. Currently, State laws governing municipal funding limit the ability of cities to provide infrastructure out of ongoing revenues. As a result, new development is generally required to "pay its own way" with regard to public facilities such as water, sewer, drainage, parks, and roadway facilities. In accordance with AB 1600, the City has enacted a development impact fee program to ensure new development pays only for its impacts and not for existing deficiencies caused by prior development.

The City of Delano, like many communities, has determined that its public works systems must not be overburdened by new development. The City's Wastewater Treatment Plant is at capacity, but expansion is currently under way and will be completed within two years. Expansion of the City is contingent upon the continued upgrading of the Wastewater Treatment Plant and system wide utility upgrades. A 20-year capital improvements program that identifies and prioritizes such needs as water main replacement, flood control, water storage, and sewage treatment plant expansion, as well as parks, streets, and sidewalk replacement, provides a guide for allocating public funds in the most productive directions.

c. Fees and Exactions

The fees and exactions required of a development to pay for the public facilities associated with the residential development pose a potential constraint to housing production. Two types of fees are charged by the City of Delano, and discussed below: development impact fees and planning processing fees. Table 5.4.H identifies the applicability of impact fees and Table 5.4.I lists the fee amounts for each category. A comparison of planning fees to those charged in other Kern County cities is found in Table 5.4.J.

Table 5.4.H - Development Impact Fee Applicability for Residential Projects

Dwelling Unit	Park[1]	Public	Sewer	Storm Drain	Transport ation	Water
New Unit	O	X	X	X	X	X
Second Unit/Granny Flat	O	X	X	O	X	X
Replacement Unit (no new connections)	O	O		O	O	O
Addition to Existing Unit	O	O	O	O	O	O
Remodel	O	O	O	O	O	O
Connect Existing Unit to Water and Sewer	O	O	X	O	O	X
Change Size of Existing Water Meter	(Pay difference in cost of meters)					
Annex Existing Unit to City[2]	--	--	O	--	--	O
Move Unit into or Within City	X	X	X	X	X	X

Notes: X = Fee required.

O = No fee required.

[1] Park Fees are only assessed on new lots in residential subdivisions per the Quimby Act Provisions.

[2] Existing unit annexed into the City are assessed for only water and sewer impacts and meter fees if connections to the City services are made.

Table 5.4.I - Residential Development Impact Fees (as of 2002)

1.	**Drainage Mitigation Fees:**				
a.	Single-family and Multifamily				$4,292/acre
2.	**Service Mitigation Fees**				
	Land Use	**Unit**	**Police**	**Fire**	**Government**
a.	Single-Family	Dwelling unit	$94.00	$207.00	$125.00
b.	Multi-family	Dwelling unit	$231.00	$77.00	$125.00
3.	**Traffic Signalization Fees**				
	Land Use	**Unit**	**Quad I**		**Quad II**
a.	Estate	By acreage	$57.00		$69.00
b.	Low Density	By acreage	$282.00		$345.00
c.	Medium Density	By acreage	$558.00		$683.00
d.	High Density	By acreage	$635.00		$801.00
4.	**Sewer Mitigation Fees**				
	Land Use	**Unit**	**West of Hwy 99**		**East of Hwy 99**
a.	Single-family	Dwelling Unit	$2,741.00		$3,171.00
b.	1-Bedroom Apt	Bedroom	$1,178.00		$1,364.00
c.	Motel Room w/Kitchen	Room	$1,178.00		$1,364.00
d.	RV Park	Space	$1,178.00		$1,364.00
e.	Nursing Homes	Bed	$2,741.00		$3,171.00

Table 5.4.J - Comparison of Planning Fees

Fee Type	Delano	Wasco	Shafter
Annexation	$2,000	$1,500	$1,678 + LAFCO fees of $825
General Plan Amendment	$750 + $10/acre	$500	$574
Conditional Use Permit	$450	$400	$540
Zone Change	$600	$500	$574
Specific Plan	Cost + $500	$400	$520 + Actual Cost
Variance	$150	$275	$570
Tentative Tract Map	$1,500 + $15/lot	$500 up to 600 lots + $4.00/additional lot	$1,850 + $25/lot
Tentative Parcel Map	$1,500 + $15/lot	$500 up to 600 lots + $4.00/additional lot	$1,850 + $25/lot
Environmental Fees	Exemption - $30 IS & Draft NegDec $350 EIR Cost + 15% for Administrative Overhead		Exemption $100 NegDec $50 EIR $2,800 deposit + actual costs

A comparison of Delano's typical residential planning fees in relation to nearby communities is shown in Table 5.4.J. Delano, Wasco, and Shafter are small residential communities. It can be seen from Table 5.4.J that Delano's planning fees are generally comparable to other small cities in its vicinity. Thus, fees and exactions do not pose a constraint on new residential development.

5.4.5 NON-GOVERNMENTAL FACTORS

a. Land Costs

The price of land is a significant ingredient in the total cost of housing. Developed land costs typically account for about one-quarter of the total cost of a home. Land costs in Southern California and Kern County have consistently been increasing since World War II as a result of inflation, increased demand due to population immigration, and decreasing land supply. This increase has an adverse effect on the ability of households, particularly low- and moderate-income households, to pay for housing.

Land costs of single-family residential lot in the City of Delano, as of 2001, typically are $12,000 to $40,000, depending on the size of the parcel and the extent of improvements contained on the lot. According to the most recent information available from the California Association of Realtors, re-sales of typical single-family home prices in the City are priced at around $89,000. Based on these estimates, land costs in the City represent from about one-quarter to one-third of the selling price of a home. In addition, the housing market is capable of producing three-bedroom rental units that are affordable to very low and low-income residents.

b. Construction Costs

Construction cost increases, like land cost increases, affect the ability of consumers to pay for housing. Construction cost increases occur due to the cost of materials, labor, and higher government imposed standards (e.g., energy conservation requirements). Current construction costs for a single-family home are roughly $55 to $65 per square foot. This is typical for Southern

California, and does not present a significant constraint to the production of housing within Delano. As noted above, the development community is currently producing market rate for-sale housing that is affordable to moderate-income households and rental housing that is affordable to low-income households.

c. Availability of Financing

The availability of capital to finance new residential development is a significant factor that can impact both the cost and the supply of housing. There are two types of capital involved in the housing market: (1) capital used by developers for initial site preparation and construction, and (2) capital for financing the purchase of units by homeowners and investors.

In general, financing for new residential development in Delano at the present time (2002) is readily available at reasonable interest rates. The current low interest rates have proven to be a benefit to the production of housing by facilitating affordable construction financing and mortgage rates.

Local Banks. There are seven local banks in Delano. As a result, there a variety of single-family and multiple family home loans available in the Delano area. Interest rates are currently competitive, and are similar to those available in other communities throughout the San Joaquin Valley. Interest rates for single-family and multiple family construction loans are variable.

VA, FHA, and conventional loans are available. The local banks do not currently have any programs specifically oriented toward the construction of affordable housing, other than those that are sponsored by governmental agencies, such as the Community Reinvestment Act.

As a result of relatively low interest rates, local banks report that refinancing of existing homes has been popular; however, such refinancing has not affected the availability of loans for home purchases.

d. Affordable Housing Financing

Funding for affordable housing currently requires financing for a first mortgage, second mortgage, and equity. An overview of each funding source is presented in the following paragraphs.

First Mortgage. Because of their low rents, affordable housing projects are financially capable of generating enough money to make monthly payments on only a relatively small first mortgage – often as low as 20 to 25 percent of total project cost. For the first mortgage lender, subordinated debt increases a project's loan-to-value and debt coverage ratios to acceptable levels, reducing risk and increasing the likelihood of obtaining private debt financing. The amount of the first mortgage that can be supported is a function of the net operating income of the project. Tax-exempt bond proceeds are sometimes used for permanent financing of low-income housing projects.

Second Mortgage (Gap Financing). A second mortgage is frequently necessary to partially fill the gap between total project costs and the amount that can be supported by the first mortgage. A below-market second mortgage provided by State or local governments or philanthropic organizations, could be structured with a low interest rate, no interest deferred payments, or as a due-on-sale loan.

The maker of the second mortgage often prefers subordinated debt rather than a project grant even though the former entails added risk. The mortgage usually contains restrictions to ensure that the property serves low-income families; otherwise it becomes due and payable. Local funds are often used to provide "soft seconds" – mortgages whose principal and interest payments may be deferred until cash flow is available or the project is refinanced or sold.

Equity. Equity, which is the money or capital invested in the project, reduces the amount needed to be financed with a first and/or second mortgage. Although equity financing can be derived from several sources, affordable housing partnerships depend greatly on the syndication of low-income housing tax credits. Ownership of these projects is usually structured as limited partnerships; corporate or individual investors are the limited partners who rely on the tax credits for market returns.

Redevelopment Agency. The Redevelopment Agency has a City Council-approved budget of $2,028,110 for 2001/2002 from expected "set-aside" funds. The projected expenditures throughout the next planning period are expected to be similar to the 2001/2002 approved budget. This will occur in several different programs: 1) the Housing Rehabilitation Program will spend $100,000, 2) the First Time Home Buyers Program will spend $500,000 dollars. The exact number of units to be rehabilitated with these funds depends of the number of applicants and the amount awarded to each applicant (see Table 5.4.K).

Thus, several funding sources are necessary as part of a financing package for a low-income housing development. In general, the following distribution per financing component as shown in Table 5.4.L is typical:

Table 5.4.K – Anticipated Redevelopment Funds/Capital Improvements, 2002-2007

Capital Improvement	2002/2003	2003/2004	2004/2005	2005/2006	2006/2007
First Time Homebuyers Program	500,000	510,000	520,200	530,604	541,216
Rental Rehabilitation Program	70,000	70,000	500,000	70,000	500,000
Housing Rehabilitation	100,000	102,000	104,040	106,121	108,243
Total Capital Improvement	**670,000**	**682,000**	**1,124,240**	**706,725**	**1,149,459**

Source: City of Delano, FY2001-02

Table 5.4.L - Distribution Per Financing Component

Financing Component	Percent of Financing	Sources of Financing (a)
First Mortgage	20 to 40 %	CCRC, SAMCO, Tax-exempt bonds, 501(c)(3) bonds
Second Mortgage	30 to 60 %	CDBG, RHCP, 20% set-aside
Equity	20 to 40 %	Tax Credits, Housing Trust Funds

5.4.6 OPPORTUNITIES FOR ENERGY AND WATER CONSERVATION

A discussion of energy conservation opportunities is required to be included in housing elements by the California Government Code Section 65583(a)(7). Utilities and related energy expenditures are a major component of a household's total shelter costs. Within the City, 97.7 percent of all households have some form of space heating 99.8 percent have complete plumbing facilities, and 99.9 percent have electrical connection according to 2000 census data. As an integral part of providing housing, these utilities can represent a claim in household income ranging from 15 to 40 percent of total housing costs, or higher, considering current and anticipated increases in energy costs. Thus, efforts to reduce energy and water consumption can significantly benefit Delano households.

The most effective home conservation measures are those that reduce the biggest user of energy: space heating. Most utility companies agree that actions to reduce air infiltration are the most cost-effective ways of minimizing space-heating requirements. Weather-stripping, caulking, duct wrapping and attic and wall insulation are all ways to reduce such energy consumption. In addition, furnaces equipped with setback thermostats and electronic ("pilotless") ignition can further reduce costs. This is now required in all new residential construction by the Uniform Building Code.

Water heating is another major energy user. Insulation blankets for water heaters, pipe insulation, and water saving showerheads are simple, add-on measures that can lower, both energy bills and water consumption. More elaborate measures include solar water heating systems that supplement the traditional water heater.

New housing construction is another area for ensuring efficient energy use. Homes that are sited to maximize solar and wind orientation can significantly reduce long-term energy needs. Further, such homes can be equipped with energy saving appliances which also lower energy and water consumption. A balance must be achieved between the short-term costs of building energy-efficient homes and the long-term benefits they provide. However, many design, construction, and landscaping techniques are available which help reduce energy consumption. Some add little or no cost to the housing unit, but have not been adopted by developers and contractors. Examples include avoiding east- and west-facing lots, reducing north-facing window areas, using drought-resistant landscaping, and employing paving materials that generate less heat.

Water conservation is a significant issue for both individual households and the City. Lower water consumption reduces monthly bills, and extends the capacities of municipal water wells and the local sewage treatment plant. More conservative landscape watering schedules and less wasteful watering systems make significant contributions to lower water demand. Inside the home, low-flow showerheads, low-flow toilets and efficient clothes and dishwashing appliances are useful in

stemming the need for water. However, by changing personal habits regarding water use (e.g., shorter showers, not pre-rinsing dishes, etc.), reductions in water use can be achieved at little or no cost.

Presently, Southern California Gas offers conservation programs for homeowners, renters, and landlords. Both companies participate in the State's Residential Conservation Service, and provide free energy audits to all households. Further, both companies offer cash rebates and low-interest financing to help offset the cost of many conservation measures. In 1990, the City Council adopted an ordinance requiring low-flow fixtures in all new development, and as a retrofit in certain remodels.

5.5 GOALS, QUANTIFIED OBJECTIVES, POLICIES, AND PROGRAMS

The intent of the Housing Element is to ensure that the housing needs of all economic segments of the community will be met through the year 2007. The housing goals and policies included in the Delano Housing Element, as well as the actions that the City will undertake to meet its housing needs, are discussed in this Chapter. A summary of actions, including identification of funding sources, responsible entities, and time frames for implementation, is also presented.

In evaluating the prior Housing Element, the City analyzed the programs it undertook, and evaluated why implementation of some programs was more successful than others. Accordingly, the City has included in this element those actions it believes can successfully be implemented and that reflect the best use of the City's limited resources.

Delano's quantified housing objectives are presented below, along with housing goals, policies, and implementing programs.

5.5.1 Quantified Objectives

The City of Delano has designed a number of implementing programs that will focus City resources on meeting its projected housing needs. The City recognizes that there are a number of factors impacting the provision of affordable housing, and will not be able to meet all projected needs during the planning period. Accordingly, the City of Delano has identified its quantified objectives for new construction and rehabilitation. Rehabilitation of existing units will be achieved through the City's efforts to link property owners with available financial assistance programs. Units that are rehabilitated are units that are converted from non-affordable to affordable by acquisition of the units or the purchase of affordability covenants. The City's conservation quantified objective is based upon projected activities of the Redevelopment Agency and City efforts to assist and cooperate with non-profit, private, and other public entities to preserve as well as provide additional affordable units. The conservation of dwelling units requires one-to-one replacement of any housing units demolished due to public or private action, the provision of stable zoning to preserve affordable housing, and the long-term affordability restrictions on assisted rental units.

The City has established its quantified objectives on the basis of Kern Council of Governments (Kern COG) regional housing needs projections for the City of Delano for the period of 2000-2007 (Table 5.5.A). Overall, it is the objective of the City of Delano that a sufficient number of market-rate housing projects take advantage of the affordable housing incentives offered to these projects to achieve 15 percent of the housing developed in the City being affordable to lower income households (5% very low income, 10% low income).

Table 5.5.A - Quantified Objectives 2000-2007

Program	Very Low	Low	Moderate/Above Moderate	Total
New Construction	374	277	977	1628
Rehabilitation	133	133	-	266
Conservation	125	125	-	250

Source: Kern COG, May 2001

5.5.2 Goals, Policies, and Implementing Programs

Goal 1

Provide a diversity of housing opportunities to enhance the City's living environment and to satisfy the shelter needs of Delano residents.

Policy 1.1

Provide adequate residential sites for the production of new for-sale and rental residential units for existing and future residents.

Implementing Programs

1.1.1 **Biennial Evaluation:** Conduct a biennial update of the City's inventory of available sites, and take appropriate action to ensure an ongoing supply of available sites at appropriate densities to meet projected housing needs. Actions to ensure an adequate supply of housing sites include changing the zoning on vacant parcels that are zoned non-residential. A list of these lands is included in Table 5.4.B.

Responsible Agency: Community Development Department.

Implementation Schedule: June 2003, and every two years thereafter.

Non-Quantified Objective: Maintenance of an inventory of available sites for use in discussions with potential developers.

Funding Source: General Fund/Redevelopment Agency.

1.1.2 **Second Unit/Accessory Units:** Actively encourage the use of second units in single-family residential areas in meeting the City's low- and moderate-income housing objectives where such second units would neither adversely affect nor alter the character of the surrounding single-family neighborhood. The City will encourage the use of second units by providing

information and forms that will inform the community of requirements for second units and help to facilitate the approval process.

Responsible Agency: Community Development Department.

Implementation Schedule: Ongoing with flyers available in December 2003 at the City's Senior Center, Library, Recreation Center, and City Hall.

Quantified Objective: Development of ten second units between 2000 and 2007.

Funding Source: No cost to the City.

Policy 1.2

Ensure the supply of safe, decent and sound housing for all residents.

Implementing Programs

1.2.1 **Monitor At-Risk Projects:** One year prior to each required Housing Element update, determine the status of financial incentives for assisted housing projects to determine whether income restrictions on such projects are "at risk" of being lifted, thereby terminating the "affordability" of the project. Where assisted housing projects are "at risk," develop strategies to preserve their affordability.

Responsible Agency: Community Development Department, based on HUD and HCD documents.

Implementation Schedule: June 2004.

Quantified Objective: Retention of existing affordable housing stock through early identification and action regarding "at risk" units.

Funding Source: CDBG.

1.2.2 **Housing Rehabilitation Program:** Assist applicants in accessing home rehabilitation loans for low- and moderate-income housing, and self-help housing projects. The City will assist applicants in accessing rehabilitation loans by creating brochures that identify what loans are available and the processes by which these loans are granted. In addition, City staff will provide technical review of forms to ensure that applicants have provided all essential information.

Responsible Agency: Community Development Department, Redevelopment Agency.

Implementation Schedule: Ongoing with flyers currently available (in English and Spanish) and distributed by the City in conjunction with Self-Help Enterprises at the Senior and Recreation Centers, City Hall, and Library.

Quantified Objective: Adequate assistance to meet the quantified objectives contained in Table 5.5.A.

Funding Source: General Fund, redevelopment funds, available housing programs.

1.2.3 **Community Education Regarding the Availability of Rehabilitation Programs:** Provide information to very low- and low-income households and other special needs groups regarding the availability of rehabilitation programs through neighborhood and community organizations, and through the media.

Responsible Agency: Community Development Department.

Implementation Schedule: Prepare a brochure of available programs by June 2003. Update every two years thereafter.

Non-Quantified Objective: Through public education, the public's ability to use programs will be enhanced and other specific quantified objectives will be easier to achieve.

Funding Source: CDBG.

1.2.4 **Housing Condition Survey:** Maintain a current housing condition survey of all housing units within the City. This survey should include the number of units in need of rehabilitation or replacement.

Responsible Agency: City Building Official.

Implementation Schedule: Ongoing with a comprehensive update one year prior to the next Housing Element update (2007).

Non-Quantified Objective: Maintenance of current information on housing conditions within the City to assist in targeting rehabilitation programs.

Funding Source: General Fund.

1.2.5 **Rental Rehabilitation Program:** Provide financial assistance to owners of rental property to rehabilitate substandard units to enable such units to remain affordable following rehabilitation. The City will provide financial assistance by applying for CDBG and HOME funds and the redevelopment agency will allocate funds for rental rehabilitation. The use of these funds will ensure that rental properties will not deteriorate and still remain affordable.

Responsible Agency: Community Development Department and Redevelopment Agency.

Implementation Schedule: Annually with the city applying for CDBG and HOME funds in February 2003.

Quantified Objective: Provide financial assistance to owners of five rental properties to rehabilitate substandard units.

Funding Source: HOME Rental Rehabilitation Funds, CDBG, and Redevelopment Agency.

1.2.6 **Code Enforcement:** Provide ongoing inspection services to review code violations on a survey and complaint basis. Examples of code violations include families living in illegal units, such as garages and recreational vehicles, construction of illegal buildings, households living in unsafe buildings, abatement of vehicles, and water conservation violations.

Responsible Agency: Building Official.

Implementation Schedule: Ongoing.

Non-Quantified Objective: Elimination of code violations within Delano.

Funding Source: Redevelopment Agency.

Policy 1.3

Provide incentives for energy conservation measures in new housing.

Implementing Programs

1.3.1 **Energy Conservation Program:** In concert with Southern California Edison and The Gas Company, implement an energy conservation program.

Responsible Agency: City Building Official, in association with PG&E.

Implementation Schedule: Ongoing.

Non-Quantified Objective: Minimize costs of space heating and cooling in new and existing dwelling units.

Funding Source: General Fund, Southern California Edison and The Gas Company.

Goal 2

Provide housing that is affordable to all economic segments of the community.

Policy 2.1

Actively pursue and support the use of available County, State, and Federal housing assistance programs.

Implementing Programs

2.1.1 **Affordable Housing Program Inventory; Pursue Available Projects.** Explore and inventory the variety of potential financial assistance programs from both the public and

private sectors to provide more affordable housing units. The Housing Coordinator will provide assistance to the City in preparation of applications for potential financial assistance programs. Additionally, the Housing Coordinator, on an annual basis, will specify which programs will be applied for by the City. All available local, State, Federal, and private affordable housing programs for new housing and for the conservation and/or rehabilitation of existing housing will be pursued, including, but not limited to the following:

- ✓ California HCD Farmworker Housing Grant Program (for development or rehabilitation of for-sale and rental housing for farm workers).
- ✓ Calhome Program (to assist in the development of for-sale housing for lower-income households).
- ✓ FDIC Affordable Housing Program (assistance for rehabilitation costs and closing costs for lower income households).
- ✓ HELP Program (for preservation of affordable housing and rehabilitation of housing).
- ✓ Home Investment Partnerships Program (HOME) (for rehabilitation of lower income and senior housing).
- ✓ HUD Single-Family Property Disposition Program (for rehabilitation of owner-occupied housing).
- ✓ Loan Packaging Program (for development and rehabilitation of affordable housing for farm workers, lower-income households, and seniors).
- ✓ Low-Income Housing Tax Credit Program (for development of rental housing and preservation of existing affordable housing for large family units).
- ✓ McAuley Institute (for new housing or rehabilitation of housing for lower-income and farmworker households).
- ✓ Mercy Loan Fund (for new housing or for rehabilitation of housing for the disabled and lower-income households).
- ✓ Neighborhood Housing Services (for rehabilitation of housing for lower income households).
- ✓ Proposition 84 (for development or conversion and rehabilitation of existing facilities for migrant farmworker housing).
- ✓ Rural Community Assistance Corporation (for new rental housing or rehabilitation of apartments for farm workers and lower-income households).
- ✓ Section 8 Housing Assistance (rent subsidies for very low-income households).
- ✓ Section 223(f) Mortgage Insurance for Purchase/Refinance (for acquisition and development of new rental housing).
- ✓ Section 241(a) Rehabilitation Loans for Multi-Family Projects (for energy conservation and rehabilitation of apartments).
- ✓ World/BRIDGE Initiative (lower interest construction financing for lower-income and farm worker housing).

Responsible Agency: Redevelopment Agency.

Implementation Schedule: The City Housing Coordinator will apply for potential financial assistance two years from the adoption of the Housing Element to assist special needs groups.

Quantified Objective: The City Housing Coordinator will apply for the following grants for potential financial assistance as needed to meet the quantified objectives of the Housing Element: one project to assist in the provision of housing accessible for disabled residents (either new housing or retrofit of existing low-income housing), two grants to assist in the provision of housing for farm workers (permanent and migrant), one grant to assist the rehabilitation of existing low income housing, and two grants to assist the provision of housing for large families and reduce overcrowding.

Non-Quantified Objective: Maximize the City's and public ability to access governmental and private housing programs, and thereby facilitate achievement of other Housing Element objectives.

Funding Source: Redevelopment Agency.

Policy 2.2

Assist and cooperate with non-profit, private, and public entities to maximize opportunities to develop affordable housing.

Implementing Programs

2.2.1 **Partnership Program:** The City will meet regularly with non-profit, private and other public entities to examine opportunities for cooperative efforts to expand the City's supply of affordable housing.

Responsible Agency: Community Development Department and Redevelopment Agency.

Implementation Schedule: Conduct first meeting within one year of Housing Element adoption, annually thereafter.

Non-Quantified Objective: Familiarize non-profit, private and other public entities involved in the production of affordable housing with the City of Delano, and thereby facilitate interest on the part of these entities in developing affordable housing in Delano.

Funding Source: Private sources, Redevelopment Agency, CDBG.

2.2.2 **Support Non-Profit Housing Sponsors:** Support non-profit corporations in their efforts to make housing more affordable to very low and low-income households. This effort will include supporting grant applications, identifying available sites for housing development, and City involvement in the development of such sites.

Responsible Agency: Community Development Department and Redevelopment Agency.

Implementation Schedule: Ongoing.

Non-Quantified Objective: By supporting these entities in their efforts, increase the production of affordable housing to meet other objectives of the Housing Element.

Funding Source: Private sources, Redevelopment Agency, CDBG.

Policy 2.3

Review and modify all standards and application processes to ensure that City standards do not act to constrain the production of affordable housing units.

Implementing Programs

2.3.1 **Maintain a Streamlined Application Process:** Continue efforts to streamline and improve the development review process, as well as eliminate any unnecessary delays and restrictions in the processing of development applications.

Responsible Agency: Community Development Department, City Engineer, and Building Official.

Implementation Schedule: Conduct a review of permitting and review procedures by June 2003, and annually thereafter.

Non-Quantified Objective: Minimize the costs of residential development within Delano attributable to the time it takes to review development applications and plans.

Funding Source: General Fund.

2.3.2 **Density Bonus Ordinance:** Monitor statutory requirements for municipal density bonus requirements.

Responsible Agency: Community Development Department.

Implementation Schedule: Check currency of City density bonus provisions against State law in December 2002, and annually thereafter.

Non-Quantified Objective: Ensure that City density bonus provisions comply with State requirements.

Funding Source: General Fund.

2.3.3 **Use of Density Bonuses:** Grant density bonuses for the provision of affordable housing units as required by State law as needed to meet the quantified objectives of the Housing Element. The City will promote the use of density bonuses by providing information and brochures to developers, which explain the benefits and opportunities to both developers and residents in utilizing the density bonus program.

Responsible Agency: General Fund, Development Applicants.

Implementation Schedule: Ongoing as requests are made.

Non-Quantified Objective: Facilitate the achievement of Housing Element objectives for the provision of new housing for all economic segments of the community.

Funding Source: Redevelopment Agency, available housing programs.

2.3.4 **Priority Building Inspections for Affordable Housing Projects:** The City will give priority to low, very low-income, and large rental unit housing projects meeting identified housing needs for the building inspections that are carried out during various stages of the construction process.

Responsible Agency: Building Official.

Implementation Schedule: Ongoing.

Non-Quantified Objective: Minimize the cost of providing affordable housing by reducing time waiting for inspections to be completed.

Funding Source: Building Permit Fees.

Policy 2.4

Facilitate the development of new housing for all economic segments of the community, including lower-income, moderate-, and above moderate-income households.

Implementing Programs

2.4.1 **Community Information:** Undertake a program to provide information to the community about annual incomes for typical occupations and the equivalent "buying power" of these incomes in today's housing market, including the annual income ranges of "very low," "low," and "moderate" incomes, and of the typical occupations that fall into these categories.

Responsible Agency: Community Development Department and Redevelopment Agency.

Implementation Schedule: Complete materials and initiate education program by January 2004.

Non-Quantified Objective: Promote community understanding of "affordable housing" and "low" and "moderate" income, thereby reducing potential community resistance to affordable housing development.

Funding Source: Redevelopment Agency.

2.4.2 **Marketing Materials:** Prepare marketing materials to be provided to the building industry, outlining opportunities for the development of new above moderate-income single-family housing within Delano.

Responsible Agency: Community Development Department.

Implementation Schedule: Complete marketing materials by June 2003, and update annually thereafter.

Non-Quantified Objective: Promote development of needed above moderate-income housing to meet quantified objectives for new housing to meet the needs of that income group.

Funding Source: General Fund.

2.4.3 **Meet with Potential Developers:** Actively seek out, prepare and distribute informational materials and conduct an annual meeting with potential developers of downtown infill sites, as well as potential developers of above moderate-income housing as a means of generating interest on their part to undertake residential projects within the City.

Responsible Agency: Community Development Department, City Manager.

Implementation Schedule: Hold first meeting by the end of December 2002, set up schedule, and meet annually thereafter.

Non-Quantified Objective: To create interest on the part of potential developers of downtown infill sites and of above moderate-income housing as a means of facilitating achievement of quantified objectives for the development of housing for these income groups.

Funding Source: General Fund.

2.4.4 **Housing for Existing Very Low- and Low-Income Residents:** Utilize CDBG funds for infrastructure improvements and available Federal, State, and local housing development programs to undertake development of housing project for Delano's existing very low- and low-income households who are living in dwellings that are in need of replacement.

Responsible Agency: Community Development Department, Redevelopment Agency.

Implementation Schedule: Ongoing.

Quantified Objective: Housing assistance to 150 existing very low- or low-income Delano residents.

Funding Source: CDBG and redevelopment funds.

Goal 3

Provide equal housing opportunities for all residents of Delano.

Policy 3.1

Encourage and support the enforcement of laws and regulations prohibiting discrimination in lending practices and in the sale or rental of housing.

Implementing Programs

3.1.1 **Cooperative Association:** Continue to refer cases and questions to HACK for enforcement of prohibitions on discrimination in lending practices and in the sale or rental of housing. Additionally, the City will create a brochure for submitting complaints and will be available at City Hall in the Community Development Department.

Responsible Agency: Community Development Department, Redevelopment Agency.

Implementation Schedule: Ongoing with information on fair housing laws in English and Spanish to be posted at the Senior and Recreation Centers, City Hall, and Library.

Non-Quantified Objective: City assistance to eliminate housing discrimination within the community.

Funding Source: General Fund.

Policy 3.2

Assure the provision of housing opportunities for those residents of the City who have special housing needs, including farm workers, the elderly, disabled, large families, and the homeless.

3.2.1 **Housing Opportunities for Special Needs Groups**: Provide housing opportunities to meet the special housing needs of farm workers (see also Program 3.2.4), elderly, disabled, large families, and the homeless (see also Program 2.1.1) by giving priority funding to development projects that include a component for special needs groups in addition to other lower-income households. The City will implement priorities based on community needs; to ensure adequate housing for all residents within special needs groups. The City will also prioritize redevelopment funds based upon the needs of the community.

Responsible Agency: Community Development Department.

Implementation Schedule: Ongoing.

Non-Quantified Objective: Maximize opportunities to address the housing needs of special needs groups within the City.

Funding Source: State and Federal housing funds, Redevelopment Funds, CDBG (specific programs listed previously).

3.2.2 **Coordination with Agencies serving the Homeless**: The City shall cooperate with public and private agencies to develop housing (including transitional housing), family counseling, transportation programs and employment programs/job referrals for the homeless.

Responsible Agency: Community Development Department, Kern County Housing Authority, private assistance agencies.

Implementation Schedule: Ongoing.

Non-Quantified Objective: Develop housing self-sufficiency for those who are currently homeless by working with appropriate agencies to implement housing and employment programs.

Funding Source: FEMA, HUD, HCD, CDBG, and private funds.

3.2.3 **Remove Constraints on the Production of Housing for Disabled Residents**: The City will analyze and determine whether its development policies and ordinances create any constraints on the development, maintenance and improvement of housing intended for persons with disabilities, consistent with Senate Bill 520, which was enacted January 1, 2002. The analysis will include an evaluation of existing land use controls, permit and processing procedures and building codes. If any constraints are found in these areas, the City will initiate actions to address these constraints, including removing the constraints or providing reasonable accommodation for housing intended for persons with disabilities.

Responsible Agency: Community Development Department.

Implementation Schedule: Complete analysis within 6 months of the adoption of the Housing Element, and initiate any needed policy or ordinance provisions within three months after completion of the analysis.

3.2.4 **Coordination with Agencies serving the Farm workers**: The City shall cooperate with public and private agencies to develop housing (including transitional housing), family counseling, transportation programs, and employment programs/job referrals for the farm workers (permanent and migrant). All available local, State, Federal, and private affordable housing programs for new housing and for the conservation and/or rehabilitation of existing housing will be pursued, including, but not limited to the following:

- ✓ California HCD Farm worker Housing Grant Program (for development or rehabilitation of for-sale and rental housing for farm workers).
- ✓ Loan Packaging Program (for development and rehabilitation of affordable housing for farm workers, lower-income households, and seniors).
- ✓ McAuley Institute (for new housing or rehabilitation of housing for lower-income and farm worker households).

- ✓ Proposition 84 (for development or conversion and rehabilitation of existing facilities for migrant farm worker housing).
- ✓ Rural Community Assistance Corporation (for new rental housing or rehabilitation of apartments for farm workers and lower-income households).
- ✓ World/BRIDGE Initiative (lower interest construction financing for lower-income and farm worker housing).

Responsible Agency: Redevelopment Agency.

Implementation Schedule: The City Housing Coordinator will apply for potential financial assistance no later than two years from the adoption of the Housing Element to assist farm workers.

Quantified Objective: The City Housing Coordinator will apply for the following grants for potential financial assistance: one project to assist in the provision of housing accessible for disabled residents (either new housing or retrofit of existing low-income housing), two grants to assist in the provision of housing for farm workers (permanent and migrant), one grant to assist the rehabilitation of existing low-income housing, and two grants to assist the provision of housing for large families and reduce overcrowding.

Non-Quantified Objective: Develop housing self-sufficiency for farm workers (permanent and migrant) by working with appropriate agencies to implement housing programs.

3.2.5 **Remove Constraints on the Production of Housing for Multifamily Residential:** The City will complete an ordinance text amendment to replace the Conditional Use Permit approval requirement for development of multiple family dwellings in R-2, R-3, and R-4 zones by a staff-administered Site Plan Review process, whereby development standards contained that are contained in the ordinance and those that are normally applied through the conditional use permit process will be applied by staff though a ministerial process. There would be no difference in architectural or design standards applied to farm worker housing, transitional housing and homeless shelters as compared with standard apartment residential construction. All project reviews will be conducted in accordance with CEQA requirements as provided by State law, including associated public and agency review and comment procedures.

Responsible Agency: Community Development Department.

Implementation Schedule: December 2003.

Non-Quantified Objective: The City will work with and conduct annual meetings with local non-profit organization (i.e. Self-Help Enterprises) to facilitate and encourage the development of housing for farm workers and emergency and transitional housing facilities by removing the constraint of the Conditional Use process.

6.0

6.0

COMMUNITY DESIGN ELEMENT

6.1 INTRODUCTION

The condition of the environment in which an individual lives, works, or plays and the experiences of conducting activities within that environment is closely related to the individual's perceived "quality of life." A resident will develop an image of a residential neighborhood by the condition and appearance of other homes, by noise levels of adjacent roads, and by the proximity of the neighborhood to activity centers. A visitor to the area will develop an image of the city based on the appearance of uses in the city center, the convenience of tourist-oriented commercial uses, traffic, parking availability, and directional signage. These experiences of the resident and visitor are a response to the City of Delano's urban design.

Community design refers to the form and function of the city which is perceived both physically and psychologically. The design must be efficient, convenient, aesthetically pleasing, and responsive to the need for clear identification and orientation. The focus of the Community Design Element is on building design, architecture, streetscape design, and circulation.

The Community Design Element also addresses the design features of Delano that contribute to the community's image and perceived "quality of life." The overall intent of this element is to establish a framework for public and private sector decision-making with respect to the overall community quality and character.

6.2 PURPOSE

The City of Delano is a rapidly growing area in Kern County in terms of population and employment. The purpose of the Community Design Element is to guide Delano as it seeks to maintain its desirable rural characteristics while gaining those benefits found in urbanized communities. The goals, objectives, and policies of the Community Design Element address the evolutionary nature of the city as well as the rural characteristics that have historically contributed to a quality of life that residents seek to preserve and enhance.

The design guidelines will provide a framework to achieve quality and compatibility in the physical design of the developing portions of the city, and to enhance existing developed areas. The design

guidelines set forth general criteria for residential, commercial, and industrial/manufacturing development, as well as for the downtown area.

The Community Design Element is not intended to be prohibitive and inflexible in nature, or to discourage design solutions that are creative and appropriate for the use and the site. Rather, the Element is intended to provide direction to landowners, architects, landscape architects, and decision-makers in order to achieve compatible and quality site and building development. The policies and guidelines shall encourage a public/private dialogue whereby creative and innovative design solutions may be realized. At the same time, the Element provides an overall urban design framework that identifies opportunities for the City to enhance the visibility and image of the community.

6.3 AUTHORIZATION

The Community Design Element is not a state required element of the general plan. Government Code Section 65302 allows local governments to adopt non-mandated elements which address issues relating to the physical development of a city. Upon adoption, the Community Design Element will have the same force and effect as the mandatory elements of the general plan.

ENVIRONMENTAL SETTING

6.4 ASSESSMENT OF EXISTING URBAN FORM AND FUNCTION

The community's aesthetics were identified as a significant factor in the community's General Plan evaluation. The community survey conducted for the General Plan identified the following issues, with their relative ranking indicated:

1. Lack of trees
2. Gateways to the community were "ugly" and needed to be fixed up.
3. Lack of landscaping in general for commercial, industrial and residential uses.
4. "Chinatown" district (Block "H") was "ugly," and is the primary State Highway frontage.
5. Bad Alleys and roads.
6. Neighborhoods are poorly kept

Specific recommendations from the community with regard to community aesthetics included the following:

1. Change the appearance of Fremont, Glenwood, and streets next to the freeway.
2. Change Chinatown; get rid of bars.
3. Increase open space through a new 18-hole golf course.
4. Downtown façade program and general business clean up
5. Need better street landscaping.
6. Create a park-like setting in the downtown.

COMMUNITY DESIGN POLICIES

6.5 GATEWAYS/STREETSCAPE DESIGN

Objectives

A. Improve the appearance of City streets and reduce visual clutter along the City's main thoroughfares/corridors.

Policies, Standards

1. Promote a city-wide street tree planting program which enhances the appearance of the street and is scaled in relationship to the function of the roadway. Tree wells shall be located and designed to ensure adequate sight distance for traffic and pedestrian safety.

2. The undergrounding of utilities along the City's main corridors is a priority. In developing areas, new development projects shall place all new utility lines underground. The City will also explore a range of options for undergrounding utilities in existing developed areas.

3. Preserve and protect views of the Sierras/foothills from the City's major roadways. Local streets should also be oriented to maximize such views.

4. Ensure all signs are compatible with the overall streetscape design including the redesign/removal of signs, which are disruptive elements.

5. Outdoor advertising billboards shall not be allowed within the City limits.

6. Establish coordinated, distinctive, and high quality signage, accent plantings and paving materials for entries into the City. Locations for these treatments include Fremont, High Street, Ellington, Garces, Cecil, Browning County Line Road, Albany Street, and Glenwood. As primary entrances to the City, these streets should reflect higher standards of development. Standards should contain provisions for minimum building setbacks, landscaping, sidewalk pattern, and street furniture, with distinctions made between upgrade of existing uses and new development. Proper orientation, design, and architectural features shall be regulated through zoning and the site plan review process.

7. The City shall implement the Downtown Streetscape plan and the Block "H" Master Plan.

6.6 RESIDENTIAL DEVELOPMENT

Objectives

A. Improve the appearance and condition of existing residential areas.

Policies, Standards

1. Continue to use Community Development Block Grant funds within housing conservation areas to rehabilitate existing dwellings and to provide support for low- and moderate-income housing programs.

2. Pursue removal of vehicles on residential property, which are abandoned, unregistered ,or in a state of disrepair. Existing City codes pertaining to abandoned vehicles shall be enforced.

3. Review the adequacy of existing Zoning Code enforcement procedures pertaining to alley maintenance. Expand the program as necessary to prohibit all use of public alleys for storage.

4. Encourage the planting of street trees in existing residential neighborhoods. Specific policies will also be included for street trees in new residential, commercial, and industrial development.

Objectives

B. Promote high quality new residential neighborhoods.

Policies, Standards

1. Encourage innovative site planning and housing design. The features that the community would like to see include landscaped parkways and sidewalks.

2. Require site plan review procedures for all single and multi-family residential development, including provisions for building setbacks, lot coverage, parking, access and circulation, outdoor lighting, signage, architecture and landscaping.

3. Encourage the planting of street trees in new single-family and multi-family residential subdivisions.

4. The following techniques should be used in the design of single and multi-family residential development:

    a. Varying front yard setbacks within the same structure;
    b. Staggered and/or reversed unit plans to provide variability in the outward appearance of the building(s);
    c. Building materials and design that ensure consistency with adjacent land uses and structures;
    d. Adequate open space and landscaping;
    e. Dense landscaping adjacent to buildings;
    f. Variety of orientations to the buildings to avoid monotony; and,
    g. Limitation on second story views to adjacent property.

5. Parking areas in multi-family residential projects should be visible from the units they serve and be located behind the building where possible. Long rows of garages or parking spaces should be avoided.

6. Landscaped finger planters within multi-family developments should be provided after an average of every ten spaces and should, where possible, align with building entrances.

7. Second story views onto adjacent private yard areas should be avoided.

8. All new residential development should include a landscaped parkway adjacent to the street curb.

9. Encourage residential developments to plant and maintain adequate and attractive front yard landscaping.

10. The City shall encourage the development of middle and upper price range of housing to increase housing opportunities for all economic segments of the community. Estate residential land use designation shall be used to encourage and preserve such housing types.

11. Design the community so that there is interaction between neighborhoods and a strong emphasis on neighborhood conservation.

6.7 COMMERCIAL AND INDUSTRIAL DEVELOPMENT

Objectives

A. Ensure that all commercial development is attractive and of high-quality design, to enhance the image of the City.

Policies, Standards

1. Establish site plan review procedures for all commercial and industrial development, including provisions for building setbacks, lot coverage, parking, access and circulation, outdoor lighting, signage, and landscaping.

2. Promote rehabilitation of appropriate commercial sites and investigate funding opportunities for rehabilitation/remodeling of small businesses.

3. Strengthen the City's sense of history by identifying and preserving historic structures throughout the community.

4. Priority should be given to development in the downtown area.

5. Buildings on a site should be linked visually through architectural style, colors and materials, signage, landscaping, design details such as light fixtures, and the use of arcades, trellis' or other open structures.

6. The height and scale of new development should be compatible with that of surrounding buildings where a desirable pattern or character has been established. New development should provide a transition from the height of adjacent structures to the maximum height of new development.

7. Tall dominating structures should be broken up by creating horizontal emphasis through the use of trim, awnings, eaves or other ornamentation, and by using a combination of complementary colors.

8. All roof equipment shall be screened from line of sight from the ground level. Screening should be an integral part of the roof design and not appear as a "tacked on" afterthought. For flat roofs, a screen enclosure behind the parapet wall may be used if it is made to appear as an integral part of the structure's design. Ground or interior-mounted mechanical equipment (with appropriate screening) is encouraged as an alternative to roof-mounting.

9. Structures in pedestrian-oriented areas should provide continuous storefronts at the ground level front elevation.

10. Entries should be protected from the elements and should create a focus or sense of entry for the building. Wall recesses, roof overhangs, canopies, arches, signs, and similar architectural features should be integral elements of building design calling attention to the importance of the entry.

11. Vertical mixed use projects, where residential uses are located above commercial or office uses, or office uses located above commercial uses, are encouraged within the downtown area, redevelopment areas, and within planned developments..

12. Buildings shall be designed with a precise concept for adequate signage. Signs shall be integrated into the design of buildings and should compliment the architecture. All signage should be compatible with the building and site design relative to colors, materials and placement, and shall respect established architectural and/or historical character.

13. Monument-type signs are preferred over tall pole signs for business identification, wherever possible. Where several tenants occupy the same site, individual wall mounted signs are appropriate in combination with a monument sign identifying the development. Custom signs, which are unique and creative, are encouraged, provided that the style of the sign complements the style and design of the building. Historic signs that are in themselves architectural features shall be retained.

14. The planting of street trees is encouraged for all existing and new commercial and industrial development.

15. Buildings, landscaping, parking and other development features should be arranged in a manner that is compatible with the size, scale and appearance of nearby development.

16. Landscaped areas should be clustered on a site to maximize their effect on the public views.

17. Landscaping should be used to define areas such as entrances to buildings and parking lots, define edges of various land uses, provide transition between neighboring properties (buffering), and provide screening for outdoor storage, loading and equipment areas.

18. Landscaping should be in scale with adjacent buildings and be of appropriate size at maturity to accomplish its intended purpose.

19. Areas of a site that are not utilized for parking, circulation, storage or other uses, shall be landscaped.

20. Parking should be screened and is to be visually subordinate to the buildings on a site. Parking lots shall not overwhelm views of a site and shall incorporate landscaping for all areas not used for vehicle storage, access or circulation.

21. Site planning should emphasize a strong relationship to the adjoining street(s) and encourage pedestrian circulation and access. Pedestrian access shall be separate from vehicular access, where feasible.

22. Site plans shall provide safe and well-defined pedestrian connections from buildings to parking areas, from buildings to the adjoining street(s), and among buildings on the same site. Pedestrian connections between commercial development and surrounding residential neighborhoods should also be provided.

23. Buildings, sidewalks, and parking lots should be located to minimize conflicts between pedestrian and vehicular circulation on a site.

24. Loading and trash facilities shall be located where they may be adequately screened from public view (generally at the rear of the structures, away from the street).

25. Long expanses of fence should be offset and architecturally designed to prevent monotony. Landscaped pockets and limited openings should be provided along said walls.

Objectives

B. Ensure that industrial development is functional, attractive and of high-quality design, to enhance the image of the City.

Policies, Standards

1. Establish site plan review procedures for all new industrial development, including provisions for building setbacks, lot coverage, parking, access and circulation, outdoor lighting, signage, and landscaping.

2. Promote rehabilitation of appropriate industrial sites and investigate funding opportunities for rehabilitation/remodeling of small businesses.

3. Encourage the planting of street trees for existing and new industrial development.

4. Site design for new industrial development shall consider the following:

   a. Controlled site access;
   b. Service, storage, and loading areas located out of public view from the street, generally at the rear or side of buildings;
   c. Screening of outdoor storage and outdoor work areas and equipment;
   d. Landscaping, signage and other features to emphasize the main entrance;
   e. Landscaping within areas visible from public streets and paving for other areas not developed for parking, storage, buildings, etc.

5. Design elements which are undesirable and should be avoided include:

   a. Large, blank, flat wall surfaces that will be visible to the public;
   b. Exposed, untreated precision block walls that will be visible to the public;
   c. Chain link fence and barbed wire;
   d. False fronts;
   e. "Stuck on" mansard roofs;
   f. Materials with high maintenance (such as stained wood, shingles or light gauge metal siding)
   g. Mirror window glazing
   h. Loading doors facing the street unless a screen wall is provided along the site's frontage; and
   i. Exposed roof drains that will be visible to the public.

6. Where industrial development abuts non-industrial uses, appropriate buffering techniques shall be employed such as setbacks, screening landscaping, or some combination of these.

7. An industrial site shall accommodate all of its required parking on-site without the use on on-street parking.

8. On-site circulation shall be designed to provide safe and efficient access for delivery vehicles, visitors and employees, and pedestrians.

9. Loading and delivery areas shall be clearly marked with directional signage where multiple access points are provided.

10. Loading areas shall be designed wherever feasible to accommodate trucks without having to back onto or otherwise use the adjoining street when feasible.

11. When security fencing is required that will be visible to the public, it should be a combination of solid pillars, or short solid wall segments, and wrought iron grillwork and not include barbed wire.

7.0

NOISE ELEMENT

7.1 INTRODUCTION

The Noise Element of a general plan is a comprehensive program for including noise control in the planning process. It is a tool for local planners to use in achieving and maintaining compatible land use with environmental noise level. The Noise Element identifies noise sensitive land uses and noise sources, and defines areas of noise impact for the purpose of developing programs to ensure that City of Delano residents will be protected from excessive noise intrusion.

The Noise Element follows the revised state guidelines in Government Code Section 653021(g) and in Section 46050.1 of the Health and Safety Code. This Element quantifies the community noise environment in terms of noise exposure for both near and long-term levels of growth and traffic activity. The information will become a guideline for the development of land use policies to achieve compatible land uses and provide baseline levels and noise source identification for local noise ordinance enforcement.

ENVIRONMENTAL SETTING

7.2 NOISE SOURCES

The existing noise environment in the City of Delano was determined by a combination of noise level measurements and noise modeling. Following is a discussion of the background noise level survey results in residential areas of the City, and a description of the studied noise sources in the City.

7.2.1 Background Noise Level Survey

The purpose of the background noise level survey was to determine the base-line noise environment in those parts of the City that are removed from obvious noise sources, such as busy roadways. Four residences, located in various quadrants of the City, were selected for the survey. Noise measurements were conducted continuously for 24 hours using unattended sound level analyzers situated in the backyards of the residences.

The background noise levels in terms of the Day/Night Average Level (L_{dn}) at the four residences ranged from about 52 to 57 dB. These are typical noise levels in suburban residential neighborhoods. The highest hourly noise levels usually occur in the daytime when human activity is highest.

L_{max} represents the highest (maximum) instantaneous noise level occurring during an hour. The L_{min} is the minimum instantaneous noise level during an hour, and the L_{eq} is the energy equivalent or average noise level during the hour. The sound level was obtained by using the A-weighting filter of a sound level meter, expressed in decibels (dB). All sound levels referred to in this settings document are in A-weighted decibels. A-weighting de-emphasizes the very low and very high frequencies of sound in a manner similar to the human ear. Most community noise standards utilize A-weighting, as it provides a high degree of correlation with human annoyance and health effects.

7.1.2 Major Stationary Noise Sources

The production of noise is an inherent part of many industrial, commercial and agricultural processes, even when the best available noise control technology applied. Noise production within industrial or commercial facilities is controlled indirectly by Federal and State employee health and safety regulations (OSHA and Cal-OSHA), but exterior noise emissions from such operations have the potential to exceed locally acceptable standards at nearby noise-sensitive land uses.

Noise exposure information for the major stationary noise sources selected for study by the City was developed from operational data obtained from source operators (when available), noise level measurements conducted at reference locations around the noise source, and file information. Only existing noise levels are described since there are too many variables and unknown conditions to predict future noise exposure.

The following discussions provide generalized information concerning the relative noise impacts of each source, and identify specific noise sources which should be considered in the review of development proposals where potential noise conflicts could result. Not all industrial noise sources in the City are discussed. Unidentified industries or other major noise sources may exist, which could generate significant noise levels and result in noise-related land use conflicts. Generalized 50 and 55 dBA hourly L_{eq} noise contours were prepared for major stationary noise sources where it was determined that such contours would be located off the property occupied by the source.

Carroll's Tire Warehouse: This business is located at the intersection of Cecil Avenue and Quincy Street. The main sources of noise in the store are banging and clanging, air tools, compressors and grinding. These sources of noise are typical of tire dealers, brake shops and muffler stores. At a distance of 50 feet the measured L_{eq} was 63.0 dBA and the L_{max} was 73.7 dBA. The hourly 50 and 55 dBA L_{eq} are 223 and 125 feet from the store.

Delano Regional Medical Center: This medical facility is located north of Garces Highway east of Lexington Street. Noise sources that are related to a medical facility are heating and ventilation equipment and cars moving through parking areas. During the inspection of the facility on December 11, 1997, it was not possible to distinguish equipment noise and car noise from background noise levels off the site (principally Highway 99).

Delano Energy Company: Located at the intersection of Pond Road and Highway 99, this facility converts organic waste materials to energy. The principal noise source is the cooling towers located on the south side of the plant. The towers operate continuously 24 hours a day. At a distance of 200 feet from the towers, the measured noise level in terms of L_{eq} and L_{max} were 67.6 and 70.3 dBA, respectively. The 50 and 55 dBA L_{eq} contours are 1,517 and 853 feet from the cooling towers.

Delano Logistic Services, Inc.: This distribution facility is located at the intersection of Lexington Street and Shuster Avenue. The principal noise source on the site is slowly moving trucks. It was not possible to distinguish noise from slowly moving trucks at a location off the site due to traffic noise from Highway 99. Typical L_{max} noise levels from slowly moving trucks are 70 – 73 dBA at 50 feet.

Delano Rock Company: This business is located between Highway 99 and High Street, and south of Garces Highway. The typical noise sources in such a facility are the concrete batching equipment, trucks operating a high idle while being loaded with concrete, truck movements on the site, and front loaders scooping sand and gravel. At a site about 300 feet form the center of the plant, measured L_{eq} values were 67.6 dBA while all noise sources were in operation. The L_{max} was 70.3 dBA. Single-family residences are located near the plant on the east side of High Street. The 50 and 55 dBA L_{eq} contours are 2,028 and 1,140 feet from the plant.

Rail Noise: The mainline of the Union Pacific Railroad (formerly Southern Pacific) runs through Delano in a north-south direction. Mostly commercial and industrial uses are located next to the track. These uses are insensitive to noise. There are approximately 20 freight train operations per day, uniformly distributed through a 24-hour day. The mean Sound Exposure Level (SEL) of Union Pacific freight trains is about 95 dB at 125 feet. The Day/Night Average (L_{dn}) of trains was calculated using train operation numbers and mean SEL values. At 125 feet, the L_{dn} is about 65 dB. Near grade crossings where the horn is blown, the L_{dn} would be about 69 dB. The distance to the 60 and 65 dB L_{dn} contours is about 269 and 125 feet, respectively.

7.3 NOISE ELEMENT POLICIES

Objectives

A. To protect the citizens of the City from the harmful and annoying effects of exposure to excessive noise.

B. To protect the economic base of the City by preventing incompatible land uses from encroaching upon existing or planned noise-producing uses.

C. To preserve the tranquility of residential areas by preventing noise-producing uses from encroaching upon existing or planned noise-sensitive uses.

D. To educate the citizens of the City concerning the effects of exposure to excessive noise and the methods available for minimizing such exposure.

E. To emphasize the reduction of noise impacts through careful site planning and project design, giving second preference to the use of noise barriers and/or structural features to buildings containing noise-sensitive land uses.

Policies, Standards

1. Table 7-A depicts the ranges of noise exposure from transportation noise sources, which are considered to be acceptable, conditionally acceptable, or conditionally unacceptable for the development of different land uses. Table 7-A shall be used to determine whether mitigation is needed for development of land uses near major transportation noise sources.

    a. In areas where the noise environment is acceptable, new development may be permitted without requiring noise mitigation.

    b. For areas where the noise environment is conditionally acceptable, new development will be required to define the site's precise noise environment, and if needed incorporate appropriate mitigation into the design of the project to reduce noise exposure to the levels specified by the Noise Element.

    c. For areas where the noise environment is conditionally unacceptable, it may not be feasible for new development to provide appropriate mitigation to achieve compliance with applicable noise standards. In such cases, other, more noise tolerant land uses would be more appropriate for the site and its noise environment.

2. New development of noise-sensitive land uses shall not be permitted in areas exposed to existing or projected future levels of noise from transportation noise sources which exceed the noise levels specified in Table 7-1 for the given land use, unless appropriate mitigation is provided.

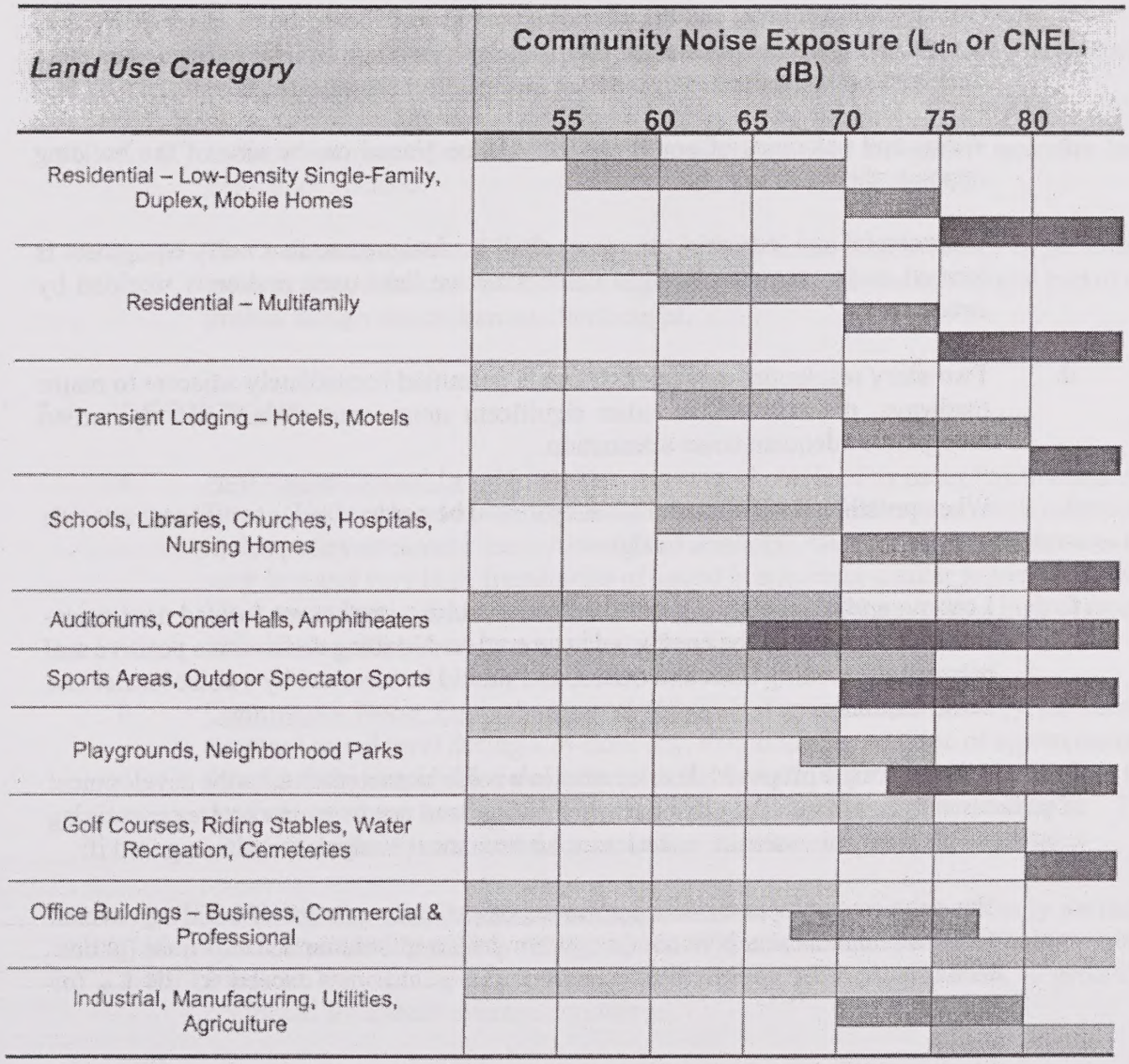
3. Noise created by new transportation noise sources, including roadway improvement projects, shall be mitigated where feasible so as not to exceed the noise levels specified in Table 7-1.

4. New development of noise-sensitive land uses shall be consistent with the noise level standards of Table 7-2, following the implementation of appropriate mitigation measures.

5. New proposed stationary noise sources, or existing stationary noise sources which undergo modifications, shall not be permitted where the noise level exceeds the standards of Table 7-2 within the area being modified. The Delano Municipal Code shall be amended to conform to these quantitative standards.

6. The preferred method of noise control for new development is thoughtful site design. Secondarily, noise control should be achieved through the use of noise barriers. Site and building design guidelines may include:

Table 7-1: California Office of Noise Control Land Use Compatibility Matrix for Community Noise Exposure



NORMALLY – Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise.

CONDITIONALLY – New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.

NORMALLY – New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.

CLEARLY – New construction or development should generally not be undertaken.

Source: California Department of Health, Guidelines for the Preparation and Content of Noise Elements of the General Plan, February 1976.

a. The backyards of single-family residences should not back onto the primary noise source. Where this is not possible, the narrow portion of the building should face the primary noise source, and the interior layout should locate the most sensitive areas away from the noise source by placing garages, storage facilities, carports or other such areas nearest the noise source.

b. Patios and balconies of apartments should be placed on the side of the building opposite the noise source.

c. Commercial and industrial structures shall be designed so that noisy equipment is located as far as possible from noise-sensitive land uses, and/or is shielded by structures.

d. Two-story residential construction that is permitted immediately adjacent to major roadways, the railroad, or other significant noise source shall be required to incorporate adequate noise attenuation.

e. When possible, residential cul-de-sacs should be perpendicular to adjacent arterials or collectors.

f. Loading and unloading activities for commercial uses that are located near noise-sensitive uses should be conducted in an enclosed loading dock with a positive seal between the loading dock and trucks, and should be screened by a noise barrier and dense landscaping.

7. Prior to approval of the proposed development in a noise impacted area, or the development of an industrial, commercial or other noise generating land use in or near an area containing existing or planned noise-sensitive land uses, an acoustical analysis may be required if:

a. The existing or projected future noise exposure at the exterior of buildings, which will contain noise sensitive uses, or within proposed outdoor activity areas (patios, decks, backyards, pool areas, recreation areas, etc.) may exceed 65 dB L_{dn} (or CNEL).

b. Interior residential noise levels resulting from offsite noise may exceed 45 dBA.

8. When noise studies are necessary they shall:

a. Be the responsibility of the applicant.

b. Be prepared by an individual or firm with demonstrable experience in the fields of environmental noise assessment and architectural acoustics.

c. Include representative noise level measurements with sufficient sampling periods and locations to adequately describe local conditions.

d. Include estimated noise levels for existing and projected future (10-20 year hence) conditions, with a comparison made to the adopted policies of the Noise Element.

e. Include recommendations for appropriate mitigation measures to achieve compliance with the adopted policies and standards of the Noise Element.

f. Include estimate of noise exposure after the prescribed mitigation measures have been implemented.

g. The acoustical analysis shall be prepared as early in the project review or permitting process as possible, so that noise mitigation measures may be an integral part of the project design rather than an afterthought.

7.4 DEFINITIONS

a. A-Weighted Sound Level (dB): The sound level obtained by using the A-weighting filter of a sound level meter, expressed in decibels (dB). All sound levels referred to in this policy document are in A-weighted decibels. A-weighting de-emphasizes the very low and very high frequencies of sound in a manner similar to the human ear. Most community noise standards utilize A-weighting, as it provides a high degree of correlation with human annoyance and health effects.

b. Community Noise Equivalent Level (CNEL): The equivalent energy (or energy average) sound level during a 24-hour day, obtained after addition of approximately five decibels to sound levels in the evening from 7:00 p.m. to 10:00 p.m. and ten decibels to sound levels in the night before 7:00 a.m. and after 10:00 p.m. The CNEL is generally computed for annual average conditions.

c. Day/Night Average Sound Level (L_{dn}): The equivalent energy (or energy average) sound level during a 24-hour day, obtained after addition of ten decibels to sound levels in the night after 10:00 p.m. and before 7:00 a.m. The L_{dn} is generally computed for annual average conditions.

d. Equivalent Sound Level (L_{eq}): The sound level containing the same total energy as a time varying signal over a given sample period. Thus, the L_{eq} is a single-valued level that expresses the time-averaged total energy of a fluctuating sound level. For example, if 64 dB is measured for 10 minutes, 68 dB is measured for 20 minutes and 73 dB is measured for 30 minutes, the 1-hour L_{eq} is about 71 dB. The L_{eq} is typically computed over 1, 8 and 24-hour sample periods.

e. New Development: Projects requiring land use or building permits, but excluding remodeling or additions to existing structures.

f. Noise-Sensitive Land Use:

1. Residential development, except temporary dwellings
2. Schools-preschool to secondary, college and university; specialized education and training.
3. Hospitals, nursing and personal care
4. Churches
5. Hotels and motels, bed and breakfast facilities

g. Outdoor Activity Areas: Patios, balconies, and swimming pool areas of multi-family dwellings; backyards of single-family dwellings; designated areas for outdoor recreation and activity for hospitals, nursing and personal care facilities.

h. Stationary Noise Source: Any fixed or mobile source not preempted from local control by existing federal or state regulations. Examples of such sources include industrial and commercial facilities and vehicle movements on private property (e.g., parking lots, truck terminals, auto racetracks, etc.)

i. Transportation Noise Source: Traffic on public roadways, railroad line operations and aircraft in flight. Control of noise from these sources is preempted by existing federal or state regulations. However, the effects of noise from transportation sources may be controlled by regulating the location and design of land uses affected by transportation noise sources.

7.5 CITY OF DELANO NOISE STANDARDS

Table 7-2
Maximum Allowable Noise Exposure-Transportation Noise Sources

Land Use	Outdoor Activity Areas L_{dn}/CNEL, dB	Interior Spaces L_{dn}/CNEL, dB
Residential (except temporary dwellings)	65[1]	45
Hotels and Motels	65[1]	45
Hospitals, Nursing and Personal Care	65[1]	45
Churches, Meeting Halls	--	45
Schools-Preschool to Secondary, College and University, Specialized Education and Training, Libraries and Museums	--	45

[1]Where the location of outdoor activity areas is unknown, the exterior noise level standard shall be applied to the boundary of planned or zoned noise-sensitive uses.

Table 7-3
Maximum Allowable Noise Exposure - Stationary Noise Sources[1]

	Daytime (7 a.m. to 10 p.m.)	Nighttime (10 p.m. to 7 a.m.)
Hourly L_{eq}, dB	55	50
Maximum level, dB	75	70

[1]As determined in outdoor activity areas. Where the location of outdoor activity areas is unknown, the noise standard shall be applied to the boundary of planned or zoned noise-sensitive uses.

8.0

PUBLIC SERVICES AND FACILITIES ELEMENT

8.1 INTRODUCTION

The Public Services and Facilities Element is intended to document information on the ability of the City and other service providers to offer services and operate facilities at acceptable standards. In response to the anticipated growth within and around Delano, the city has chosen to address the maintenance and future provision of essential public facilities and services.

The Public Services and Facilities Element specifically addresses the following:

- Law Enforcement
- Solid Waste Disposal
- Health Services
- Schools
- Utilities
- Kern County Library System
- Public Transportation
- Fire Facilities
- Water System
- Sewer Collection and Treatment System
- Storm Drainage

8.2 AUTHORIZATION

Under state planning law, local governments have the discretion to adopt any other elements or address any other subjects which relate to the physical development of the city. The City of Delano has elected to incorporate certain public facilities and services within this Element. Once adopted, goals, policies, and programs carry the same authority as those adopted for subjects contained in the mandated elements of the general plan.

8.3 PUBLIC SERVICES AND UTILITIES

8.3.1 Law Enforcement

The City of Delano is patrolled on a 24 hour basis by the City operated Delano Police Department, which currently consists of twenty patrol officers, seven reserve officers, five sergeants, and four detectives. Between July 1997 and June 1998 the department responded to approximately 17,000 calls for service. The City operates under a mutual aid agreement with the Tulare and Kern County Sheriff's Departments.

The current Police Department level of staffing for the City's non-incarcerated 1998 population of 28,688 results in a ratio of 1.4 equivalent officers per one thousand population. In an average month, there are currently 1480 calls for service. The Delano General Plan update identifies a staffing ratio of 1.4 equivalent officers per thousand persons. Based on this policy and the 20-year population growth projections described in the General Plan update, an additional 39 equivalent officers would need to be hired to meet this increase in population at the current Level of Service.

8.3.2 Solid Waste Disposal

The City of Delano provides twice-a-week pickup of solid waste within the City limits. Residential customers are billed $9.05 monthly for this service. This amount has not changed since 1993. Approximately 24% of the past three year's budgets for solid waste is allocated for capital expenses. Of this amount, approximately 2% is allocated to new capital requirements, the balance is allocated to replacement. Increase of the fee is expected since by 2020 the population is expected to have doubled, and the city area increased. Further, the possible closure of the McFarland/Delano Transfer Station at Stradley and Woollomes Avenues will require the city to deliver its solid waste to the Shafter Landfill. Growth of the City combined with the consumption of vehicle time in trips to the landfill will require that additional collection vehicles be purchased.

8.3.3 Health Services

Delano is served by the Delano Regional Medical Center. Several medical clinics also provide private and public health care services within the City limits and three private convalescent homes/hospitals provide a variety of levels of care for seniors and the infirmed ranging from assisted living to full convalescent care. Specialized medical services are available within thirty minutes from Bakersfield, within forty-five minutes from Visalia and within ninety minutes from Fresno.

8.3.4 Schools

The Delano Union Elementary School District and the Delano Union High School District provide educational services. Table 8-1 presents the schools which currently serve the City of Delano.

Table 8-1
Delano Public School System
School Enrollments and Design Capacities

Delano Union High School District	Grades	Enrollment	Design Capacity
Delano High School	9-12	2,750	1,200
Valley High School (continuation)	10-12	183	--

Delano Union Elementary School District	Grades	Enrollment	Design Capacity[1]	Multi-Track Year-Round Capacity[2]
Almond Tree Middle School	6-8	795	668	802
Cecil Avenue Middle School	6-8	1089	884	1060
Albany Park Elementary	K-5	667	180	216
Del Vista Elementary	K-5	739	396	475
Fremont Elementary	K-5	810	796	955
Terrace Elementary	K-5	645	280	336
Valle Vista Elementary	K-5	724	160	192
Princeton Street elementary	K-5	750	656	787

1 Design Capacity is defined by the DUESD as permanent structures and district owned relocatable classrooms.
2 The DUESD is able to facilitate enrollment in excess of designed capacity at each site by implementing Multi-Track year-round Scheduling and adding leased relocatable classrooms.

A developer fee justification report prepared by the Delano Union Elementary School and Delano High School District identified overcrowded conditions in all of Delano's schools. This overcrowding was compounded by recent passage of SB1777 and SB1789, which provided financial incentives to schools, which were able to reduce class size in grades K-3 to a ratio of 20 pupils per teacher, by February, 1997. The District proposed plans to reduce class size and relieve current overcrowding by enlarging existing sites and adding relocatable classrooms. Future student enrollment projections indicate new school sites will be needed to accommodate future development and increased student enrollment. Current and future expansions will be funded through the State of California, local property taxes and developer fees levied in accordance with State legislation.

The Delano Union School District and the City of Delano agreed in 1997 that the potential existed for inadequate financing of needed new school facilities. These agencies agreed to evaluate land use decisions based on:

1. Preparation of a school impact analysis, including an assessment of the total cost per student of providing new school facilities.

2. Requirement for certification from the school district for legislative land use changes that adequate school facilities exist.

3. A legislative land use proposal shall only be allowed when the school district certifies that adequate school facilities are or will be available.

4. Certain projects, including development agreements for commercial and industrial projects, are excluded from the above provision, provided they pay school impact fees authorized by State statute.

The Leroy Greene School Facilities Act of 1998, enacted by Senate Bill 50 and funded through the $9.2 billion of Proposition 1A approved by voters in November 1998 has altered the relationship between the city and the school districts. The Act essentially nullifies these procedures, and identifies the school districts and the State as exclusively responsible for school impact mitigation. The Greene Act also suspended the Mira, Hart, and Murrieta court cases for at least eight years, and prohibited local agencies from denying land use approvals on the basis of school adequacy and reinstated a school facility fee cap. The statutory fee for residential projects in 1998 is $1.93 per square foot and $0.31 per square foot for commercial and industrial development. School districts may impose additional fees under specific circumstances defined in the Greene Act. The city has agreed to regularly review its role in school impact mitigation.

8.3.5 Utilities

Electricity – Edison International is the primary provider of electricity for the City of Delano. All electrical services for the City are provided by a combination of inter-ties and substations. There are currently no locally-produced power sources in Delano. Edison does not provide information concerning existing or projected generating capacity for either Delano or Kern County, stating that it fills capacity as applications for service are received. Although Edison remains the primary provider of electrical services for the City of Delano, Federal utility regulations may allow for the entry of other utility providers into the Delano market area.

Natural Gas - Natural gas is provided to urbanized areas of Delano by The Gas Company of Southern California. This service can be provided only where natural gas pipelines have been installed. The rural outskirts of the City do not have this service. Residents living in such areas who run gas appliances must purchase bottled propane from one of several providers in the region (see following section).

–Although the majority of the City of Delano is serviced by natural gas lines, certain rural areas are not provided with natural gas service.. For those residents not directly served by such lines, bottled propane or butane is necessary to run gas appliances. There are several providers who deliver bottled gas to residential users who own or lease tanks on their property. Several providers sell bottled gas from fixed storage tanks to consumers who bring small, portable tanks to the providers' premises.

8.3.6 Kern County Library System

Library service is provided by the County of Kern, located on 10th Avenue in the downtown area.

8.3.7 Fire Facilities

The City of Delano contracts with the Kern County Fire Department (KCFD) for fire prevention and protection services. KCFD Stations 34 and 37, located at 1001 12th and 132 West 11th Avenues, respectively, now serve the City of Delano. According to the Department, these two fire stations are adequate to serve the current population. They are augmented by other KCFD resources in the County, the nearest being in McFarland. More sophisticated services provided by the KCFD, such as hazmat response equipment and personnel are also available for dispatch to the Delano area.

New fire facilities will be required to serve 2020 development. Their timing and placement is based on a number of factors evaluated by the KCFD. These include the location of new development, residential population density, and type of land uses constructed. The Safety Element of the General Plan provides for one new fire company for each 14,000 to 15,000 residents. Based on a non-incarcerated 2020 population of over 57,000, this indicates that at least two additional fire stations will be required.

Delano is currently charged $1,100,000 per year with a 3% inflation adjustment for a five year agreement for fire service with the KCFD. According to KCFD, the capital portion of this cost is inconsequential. Stations added for population increment increases of 14,000 (per the standard in the General Plan update) in 2010 and 2020 will require an additional $1 million each for land and buildings.

8.3.8 Water System

The City of Delano is the water purveyor within the City. The Kern County Water Basin is the sub-basin from which the City draws its water. This portion of the water basin historically has been considered to be in an overdraft condition. Review of maps that track the change in groundwater levels year to year somewhat confirm this assertion. The maps, prepared by the Kern County Water Agency, show an annual drop in water surface elevation ranging from no change to a decrease of approximately 30 feet. What greatly influences the groundwater elevation is the amount of surface water that is available for agricultural use. During drought years, the agricultural entitlements from the State Water Project (SWP) and the Central Valley Project (CVP) are sharply curtailed, requiring farmers to use groundwater for irrigation.

The City of Delano currently has nine wells in production, but only eight are available to meet the water needs of the general City population. The ninth, Well 23, located at North Kern State Prison, serves only the prison and is not connected to the City system. Capacities range from 775 gallons per minute (gpm) to 2,000 gpm with an average of 1,284 gpm. Recently, two wells, Well 5 and Well 18 have been taken out of production due to the presence of DBCP and hydrogen sulfide, respectively, in the water. This creates an odor and taste problem that requires treatment with chlorination prior to being distributed for use. Table 8.2 summarizes the depth and capacity of each well that serves the City of Delano.

Table 8.2: Existing City of Delano Water Wells

Well Number	Well Depth (feet)	Capacity (gpm)
4	1,000	1,000
12	1,000	775
14	1,000	1,200
19	1,400	1,200
20	1,400	1,200
21	1,400	2,000
22	1,400	1,500
24	N/A	1,400
Total		**10,275 gpm**

Based on Table 8.2, the City of Delano well system has the capacity of pumping 14.8 million gallons per day (mgd; the equivalent of 10,275 gpm) for domestic use and fire suppression. The City is able of storing 4.6 million gallons in aboveground storage tanks. In addition, 4.4 million gallons of storage is located at North Kern Prison.

When analyzing the existing and future capacities of the Delano water system, the water demand from North Kern State Prison will not be taken into account. This is because the prison effectively has a dedicated water system and does not impact water delivery to the City, except for its contribution to regional overdraft. The Delano Public Utilities Department has indicated that current average water demand for the City is 6.3 mgd. The City estimates peak water demand as twice the average demand; therefore currently the City of Delano's well system is capable of supplying enough water to handle the peak demand of 12.6 mgd.

The current water demand of the City is 220 gallons per capita per day. The City's recent General Plan EIR projects both average daily demand for water and peak water requirements for the City of Delano, as shown in Table 8.3. The population figures in Table 8.3 were drawn from the General Plan population projections and do not include the inmates housed at the prison.

Table 8.3: Future Water Demand for City of Delano

Year	Population	Average Demand	Peak Demand
1998	28,688	6.3 mgd	12.6 mgd
2000	31,975	7.0 mgd	14.0 mgd
2010	43,897	9.7 mgd	19.4 mgd
2020	57,390	12.6 mgd	25.2 mgd

Source: City of Delano

As shown in Table 8.3, Delano will need to supply 25.2 mgd to meet the peak needs of its 2020 population. Subtracting the current production capacity of 14.8 mgd from the projected demand of 25.2 mgd, Delano's net water requirement for 2020 growth is 10.4 mgd. This does not take into account any industrial uses that could be heavy water users. Based on an average well production of 1,284 gpm per well, six new wells will be required by 2020 for new development. The City's approach to planning the water distribution system is to expand the existing grid pattern with 12-inch water mains located on the section lines and 8-inch mains on the mid-section lines. If equipped with

pressure-sustaining valves, this would build on the grid main system with reliable pressure zones. The City has mapped the future locations for these needed wells and water mains.

As previously discussed, this portion of the Kern County Water Basin is generally considered to be in an overdraft condition. Increased pumping of groundwater for domestic use will continue to exacerbate this condition. As an aquifer is drawn down, the tendency for an increase in the presence of hydrogen sulfides and other undesirable substances will decrease water quality. These contaminants can be treated, however, and domestic water that meets water quality regulations can be delivered to the City of Delano.

8.3.9 Sewer Collection and Treatment System

The City of Delano collects and transmits all domestic and industrial wastewater to the City's wastewater treatment plant located west of Delano on Lytle Avenue between Garces Highway and Cecil Avenue. The plant also accepts the influent from North Kern State Prison, who funded a 0.8 mgd expansion to the treatment plant in the early 1990s. The current treatment plant, which provides primary and secondary treatment of wastewater, has a capacity of 4.4 mgd and receives 3.9 mgd from both the City of Delano and North Kern State Prison. The City of Delano generates 114 gallons per capita per day of wastewater to be treated.

The plant was originally designed with a capacity of 3.6 mgd and can be expanded to a capacity of 7.2 mgd. The plant expansion constructed when the prison was built brought the plant to its current 4.4 mgd capacity. Table 8.4, which was included in the City's recent General Plan EIR, projects the amount of wastewater treatment plant capacity required for the projected population.

Table 8.4: Projected Wastewater Treatment Plant Demands

Year	Population	Capacity
1998	34,143	3.9 mgd
2000	37,430	4.3 mgd
2010	49,352	5.6 mgd
2020	62,845	7.2 mgd

Source: City of Delano

Table 8.4 indicates that the City's treatment and collection system is adequate to handle the expected growth of the City through 2020, subject to the completion of planned treatment plant expansion to a minimum capacity of 7.2 mgd. The City expects that additional land will be needed for plant facilities to treat wastewater generated by the projected growth. In addition, the City currently does not have the capacity to dispose of any additional effluent.

The City of Delano is currently working on an expansion of the wastewater treatment plant. The City has contracted with Carollo Engineers for this expansion. The project is currently in the design phase and is expected to expand the capacity of the treatment plant to at least a capacity of 7.2 mgd. The expansion to the wastewater treatment plant includes the construction of a new trunk line to convey existing and anticipated flows to the wastewater treatment plant. The existing collection system needs to be upgraded at several locations throughout the City to bring the system up to future

flows and standards. The upgrade and expansion consist of various upgrades and improvements to equipment at the wastewater treatment plant. Also part of the wastewater treatment plant expansion is the construction of a new effluent disposal gravity pipeline to convey the existing and projected effluent flows, which have the potential to be delivered to the Alpaugh Irrigation District's facilities. Conveyance of effluent in this new pipeline is currently being designed by Carollo Engineers. In addition, the City has planned additional sewer lines that will accommodate the anticipated growth within the City. However, it should be noted that the City's wastewater treatment collection system does not have the ability to serve lands east of Driver Road. Likewise, the City will not be able to provide future service east of Driver Road without significant infrastructure expansions and upgrades, which are beyond the current scope of work of Carollo Engineers.

The current wastewater infrastructure projects are being funded by development impact fees and connection fees. However, the City will also be considering a rate increase in Fiscal Year 2005-2006 to ensure adequate funding for both the expansion project and for operations and maintenance of the entire wastewater collection and treatment system.

8.3.11 Storm Drainage

Incremental storm drainage will be necessary as urban development occurs. As is currently the practice, water will be surface drained approximately 160 acres of residential land before needing to pick up the flow with a storm drain pipe. Basins would be constructed that will accept up to 640 acres of drainage through a combination of surface flow and storm drains. This enables the basins to be of sufficient size to be effective recreation areas during the non-rainy seasons. One acre-foot of retention would be needed for each 20 acres of developed residential land. This means that every section will need to retain 32 acre-feet of drainage. The Development Cost and Fee Study Report prepared for this General Plan listed the needs and associated costs.

Public Facility Element Policies

8.4 PUBLIC FACILITY IMPROVEMENT

Objectives

A. Ensure that new development pays its own way, including both needed facilities and incremental demands on existing facilities.

B. Provision of adequate services and facilities needed to support existing and planned land uses throughout the community.

Policies, Standards

1. Continue to coordinate community irrigation ditch issues with local districts, private ditch companies, private land owners, and public agencies. Irrigation ditches shall be piped as a condition of approval prior to development on subject property.

2. A master plan for the development and funding of necessary services and utilities (including but not limited to storm drainage, water and sanitary facilities) shall be developed and adopted. Funding can be through the formation of an assessment district, entering into deferral agreements or direct developer funding of improvements. Distribution of cost for improvements shall be accomplished in a fair and equitable manner.

3. Developers shall prepare an infrastructure and public services assessment as part of each annexation application determine infrastructure needs, feasibility, timing, and financing.

4. Prepare and implement Citywide infrastructure master plans which carry out adopted land use goals, objectives and policies and federal and State regulations. These master plans shall be implemented through various funding mechanisms including assessment district, property owner's associations' user fees, development impact fees, mitigation payments, reimbursement agreements and/or other mechanisms which provide for equitable distribution of development and maintenance costs.

5. Require the extension and construction of infrastructure to proposed developments according to adopted elements and master plans. The City shall use reimbursement agreements or other financing techniques to reimburse developments for any oversizing cost, which may be required.

6. Coordinate urban growth management planning with public and private utilities.

7. Design storm water runoff drainage structures to decrease erosion.

8. Development in floodway areas shall be in accordance with regulations of the Federal Emergency Management Agency.

9. Development fee credit may be given for public improvements made by a builder but shall not exceed the amount of fees.

10. Developers shall construct all tributary facilities necessary to connect to major facilities, whether or not the major facilities have yet been constructed.

11. Temporary drainage facilities such as ponding basins may be constructed by the developer if the major facilities are not available, subject to City determination and approval. The developer will also be required to pay all applicable drainage fees in addition to constructing temporary facilities at his own cost.

12. Temporary drainage facilities such as retention basins shall be dedicated to the City. If the basin is abandoned within ten years, the property would revert to the original owner, subject to redevelopment of the site in a manner satisfactory to the City.

13. Upon the collection of adequate funds, the City will install major facilities in accordance with the master plan at the locations deemed most essential by the City, with due regard for

community needs and areas from which fees were collected. To make the best use of funds, growth shall be encouraged in areas where it is possible to develop facilities incrementally.

14. To encourage groundwater recharge, ponding basins shall be designed as retention basins. However, pumping facilities shall be included in such facilities to handle peak flows and to provide for disposal of storm water into irrigation ditches when necessary. Stormwater inflow into irrigation district canals and pipelines shall be subject to existing or future agreements by and between the City and the irrigation districts specifying maximum inflow, maximum service area boundary and any other limitation thereto.

15. New development shall demonstrate that adequate sewerage capacity exists prior to development or that conditions of project approval will insure that sewerage capacity will be created as part of the project prior to the issuance of building permits. Conditions may include installation of necessary facilities or other methods acceptable to the City.

16. New municipal water well sites should be planned which include pump, storage, pressure filtration and/or treatment equipment. These new wells should be located so that they will not conflict with planned residential neighborhoods. They should have design, screening, landscaping and architectural improvements which make them compatible with adjacent land uses.

17. The City shall require industrial sewage pretreatment to conserve biological treatment capacity at the wastewater treatment plant. Water conservation measures should also be encouraged for industrial, commercial and residential uses to preserve hydraulic capacity at the treatment plant and to reduce impacts to the sewerage system.

18. The City shall require the connection of existing and new businesses, residents and industries to the City's water and sewer system. The City shall establish fees, which enable it to recover the costs of such connection.

19. A finding shall be made by the Public Works Department to document that an adequate supply of potable water can be provided to serve the domestic and fire suppression needs of each proposed development prior to approval by the City Council.

20. Conditions of approval shall be implemented with each development to assure that the necessary water production, distribution and/or treatment facility is in place prior to issuance of a building permit.

21. The City of Delano shall cooperate with local water agencies to identify and resolve long-term water supply issues.

22. The City of Delano shall explore the feasibility of the following long-range water resource issues:

    a. Connecting its water infrastructure currently serving North Kern State Prison with the City system.

b. Above ground storage and valving system to provide a 24 hour back-up water supply.
c. Emergency back-up power supply for the water system, whether by storage tanks or standby generators.

23. A finding shall be made by the Public Works Department to document that sewer collection and wastewater treatment can be provided to serve each proposed development prior to approval by the City Council.

24. Conditions of approval shall be implemented with each development to assure that the necessary sewer collection facility is in place and/or wastewater treatment plant capacity is available prior to issuance of a building permit.

25. Monitor treatment plant operations and consider the related effects of land use changes when evaluating plan amendments.

8.5 HEALTH CARE FACILITIES

Objectives

A. Facilitate a continued high level of health care services in the community.

Policies, Standards

1. Facilitate the expansion of Delano Regional Medical Center (DRMC) and associated uses such as parking, private medical offices and support facilities.
2. At a time convenient for both the City and the DRMC, these parties shall cooperate on the development of a plan for the DRMC environs, to integrate an expanded hospital facility, medical office uses, recreational uses, high quality residential uses, open space, and needed infrastructure.

3. Until a specific plan has been adopted, land use and zoning activity in the DRMC environs will include analysis of the proposals' effect on the medical center current and future functions.

8.6 LOCAL GOVERNMENT FACILITIES AND SERVICES

Objectives

A. Provide high quality government facilities and services to the general public. Local government facilities and services shall be directed to the Central Business District of the community to the greatest extent possible.

Policies, Standards

1. Maintain innovative solid waste service and programs.

2. The City's Capital Improvement Program shall be adequate to meet future growth and development needs in conformity with the goals, policies and objectives of the General Plan.

9.0

9.0

SAFETY ELEMENT

ENVIRONMENTAL SETTING

9.1 INTRODUCTION

California's geological and climatic composition creates an array of scenic and ecological wonders. While these natural conditions make our state unique and aesthetically pleasing, the potential for natural-related catastrophes becomes greater. Subsequently, the State of California has experienced an increasing number of earthquakes, fires, floods, landslides, and other natural hazards during the past two decades.

In 1971, the state legislature amended the California Government Code to include two additional mandatory elements to the general plan requirements. Thus, the Seismic Safety Element and the Safety Element were incorporated as part of the mandatory elements that must be adopted by all cities and counties.

Under Section 65302(f) of the Code, the Seismic Safety Element must consist

> *...of an identification and appraisal of seismic hazards such as susceptibility to surface ruptures from faulting, to ground shaking, to ground failure or to the effects of seismically induced waves as tsunamis and seiches. The seismic safety element shall also include an appraisal of mudslides, landslides, and slope stability as necessary geologic hazards that must be considered simultaneously with other hazards such as possible surface ruptures from faulting, ground shaking, ground failure and seismically induced waves.*

Section 65302.1 requires the Safety Element to provide

> *...for the protection of the community from fires and geologic hazards including features necessary for such protection as evacuation routes, peak load water supply requirements, minimum road widths, clearances around structures, and geologic hazards mapping in areas of known geologic hazards.*

Because the consequences of natural hazards are inter-related, the Seismic Safety Element and Safety Element will be prepared jointly as a single issue of concern. This Safety Element of the

Delano General Plan will identify and discuss various hazards that presently occur and those that potentially threaten the Delano Planning Area and Kern County.
The intent of the Safety Element is to reduce and minimize the economic, social, and physical disruption created by natural geologic dangers. In this portion of the General Plan, various measures will be discussed to improve the protection of public health, safety, and welfare of the community against the geologic, fire, and flood hazards. Ultimately, this element will increase public awareness about the danger of natural hazards.

9.2 FRAMEWORK

The Safety Element of the General Plan, which combines the mandated Safety Element and Seismic Safety Element, is structured in the following manner:

A. Identification of seismic and other geologic hazards as well as fire and flood hazards commonly found in Kern County.

B. Assessment of geologic, seismic, and fire hazard potential in the Delano Planning Area.

C. Assessment of levels of acceptable risks to life and property by local residents in the Delano Planning Area.

D. Identification of major safety hazard issues.

E. Outline of safety hazard policies that will help reduce the geologic and natural dangers that threaten the health and safety of the community.

F. Listing of Safety Hazards Action Programs that are to be implemented to insure the attainment of safety hazard policies and to improve the protection of the residents from destruction and damage of natural and geologic occurrences.

9.3 TYPES OF SAFETY HAZARDS

9.3.1 Seismic-Related Hazards

Fault Displacement

Fault movement is theorized to result from "Elastic Rebound." Under this theory of quake movement, a fault is incapable of movement until strain has built up in the ground on either side. The continual shifting of the earth's crust also creates additional strain on the fault. Rocks on the surface and subsurface become deformed but hold their positions. Finally, the accumulated stress will become too great for the rocks to resist and the earth quickly snaps into an unstrained position.

This process of a slow build-up and sudden release within masses of rocks creates the shock waves we know as earthquakes.

There are several faults throughout California, most of which are extinct and long dormant. However, those faults that are active or potentially active pose a great danger to both man and the environment. A major problem for geologists and technicians is identifying where the next displacement will occur along a particular fault. Faults usually consist of a system of branch and secondary faults.

Ground Shaking

One of the major hazards caused by seismic activity is ground shaking. When the elastic strains are transferred from potential energy to kinetic energy, the sudden movement is so great that the resulting shaking motion may send damaging shock waves miles away. Ground shaking is commonly found in areas underlain with soft, loose, water-saturated sediments. In areas with large amounts of alluvial soils, the potential for serious damage to structures, especially tall buildings, is significant. Without structural reinforcements to help withstand the strong lateral movements, the vibrations of the earthquake tremor can incur destruction to life and property.

9.3.2 Geologic Hazards

Liquification

Liquification is a natural process whereby water in unconsolidated sand or other granular elements are subjected to pressure generally caused by ground motion. While the granular sand is compressible, the water is not and, thus, seeks to be released. As the fluid begins to move out of the materials, the sand loses its strength. The reaction is similar to the properties of quicksand. In areas where liquefied materials are in large underground layers, the occurrence virtually results in the ground flowing out from underneath the buildings. This geologic hazard is potentially dangerous in areas subjected to high seismic activity during the wet seasons of the year. It can also occur in some areas with shallow water tables.

Erosion

Land erosion is a natural process which wears down the materials of the earth through weathering and fragmentation. Another type of erosion called lakeshore erosion is caused by natural and manmade wave motion. In instances where erosion is induced by seismic activity, the natural phenomenon is likely to occur on gentle to steep slopes covered with unconsolidated sediments. Landslides, tilting, and offsetting along fault zones are examples of natural situations that aggravate this geologic hazard. Losses from this geologic hazard can be minimized through efficient engineering design, proper grading and drainage, and periodic removal of sediments from drainage systems and basins.

Flooding

Flooding is a natural phenomenon caused by an overwhelming volume of water rising above its normal waterline and spreading over the land. Flooding may result in failure of dams, canal banks, or irrigation systems. In some cases the presence of landslides block drainage channels, streams, and rivers. Much of the damage caused by flooding is a result of residential and commercial structures located within a floodplain.

Land Subsidence

Land subsidence is a type of ground failure that is related to seismic activities, such as ground shaking. This hazard is created by the removal of large volumes of fluids from underground reservoirs and hydrocompaction, the addition of surface water to certain types of soils. The result is a sinking or collapse of the soil structure in the affected area. Land subsidence increases the maintenance problems on roads, underground utilities, and canals. Common mitigating practices include injecting water into the ground to raise the water table and reducing ground pumpage from the affected water table.

There are four types of subsidence in Kern County. These subsidence causations are identified as tectonic activity, withdrawal of groundwater, extraction of oil and gas, and hydrocompaction of moisture-deficient alluvial deposits.

Tectonic subsidence is recognized as the long-term slow sinking of the San Joaquin Valley trough. It is not apparently noticeable and is significant only over a geologic time period.

Subsidence caused by withdrawal of groundwater is the major form of subsidence in the Delano area. Water from subterranean tables is being extracted at a rate faster than it can be replenished, thus causing a decline of the water levels. This problem is evident in many parts of Kern County and should be of major concern. Subsidence caused by groundwater withdrawal should be reduced and regulated, especially in urban areas. As a result of groundwater subsidence, areas south of Bakersfield and in other parts of the County have experienced a lowering of the ground level.

Subsidence caused by oil and gas extraction is considered insignificant and is not a serious concern. The State Division of Oil and Gas guards against hazardous extraction levels by: 1) monitoring subsidence in oil and gas fields; 2) regulating oil and gas withdrawals; and 3) repressuring the fields.

Subsidence caused by hydrocompaction of alluvial deposits is another form of subsidence found in Kern County. This collapse of the soil structure occurs in near-surface strata where rainfall or other moisture has not penetrated during a long period of time. Areas with moisture-deficient alluvial deposits can cause considerable damage and thus, should be mapped, studied, and evaluated.

Landsliding

This natural hazard is also associated with earthquake activity. Landslides are defined as the relatively rapid downslope movement of soil, rock, and rock debris as a mass. The rate of this downslope movement of materials may vary, ranging from speeds of twenty miles per hour to one inch per year. Although landslides can be identified with seismic activity, these hazards are commonly related with irregular topography, soil with high ground failure and areas disturbed by human activity.

9.3.3 Fire Hazard

Home Fires

There are various reasons for the cause of home fires. Most are related to human behavior: cooking, smoking, heating, misuse of matches, and unattended fireplaces are examples of common causes for

home fires. The danger of home fires is increased when wood-shingled roofs, wooden exteriors, slim setbacks, and woodpiles are present.

Indoor Public Assembly Facilities

Facilities that are utilized to accommodate large groupings of people pose a unique fire hazard for the occupants. Because the people are generally unfamiliar with the surroundings, the potential for a mass-panic situation is of major concern. Examples of these indoor public assembly facilities include churches, theatres, auditoriums, and restaurants. In some instances, the buildings do not adhere to present fire regulations.

High Fire Potential Buildings

Some hazardous buildings have a higher potential for fire loss and damage than others. These fire hazardous buildings permit fires to spread quickly within the structures. The characteristics of these structures include obsolete heating and ventilation systems, inadequate wiring, no fire walls, and open stairwells. Usually, high fire potential buildings are older residential and commercial structures.

Brush Fires

Brush fires are a very serious fire hazard both in and out of a city's jurisdictional boundaries. These fires usually occur in the warmer months of the year. When the planted or natural vegetation begins to dry in the summer heat, the danger is quite significant because the potential fuel of a brush fire upon ignition is tremendous. Property owners with homes adjacent to uncleared vacant lots become the unknowing targets of city brush fires.

9.4 RISK ACCEPTANCE

The Safety Element emphasizes misfortunes caused by natural or unforeseen occurrences. In this respect, a hazard can be defined as an unexpected disaster or accident, occurring in a random fashion. Because of the uncertainty of its occurrence, it becomes difficult to evaluate the hazard and establish an appropriate risk factor to the hazard.

In preparing these mandated issues of concern, the State of California requires that local governments specify the "level or nature of acceptable risk to life and property." While no society is deemed "hazard-free," an attempt must be made to establish appropriate levels of safety for the community, even though the proper planning response may be of a judgmental nature. The potential for natural and man-made hazards are continually present, but through public policy and acceptable mitigating measures, the consequences can be minimized.

Subsequently, risk can be seen as "the degree of probability of a hazardous occurrence." Due to the unpredictability of a hazardous occurrence, the planning perspective is one of policy statements that is politically and economically acceptable to the general public and the local government.

There are many aspects that must be considered by the public when acceptable risk is being discussed.

- Economics. The early methods of determining acceptable risk levels dealt with the relationship of losses to earthquake intensity (Mercali scale). Variability in earthquakes and other factors make this type of risk evaluation relatively inadequate. While minimal losses can be attained through increased cost, risk will be acceptable when the public is no longer willing to pay additional costs.

- Cognizance. Risks taken unknowingly are very different from risks taken with full awareness. The public should be aware of all identified hazards and the risks that surround each specific hazard. It must be the duty of the proper public agencies to provide the necessary information which will assist the public in determining the risk levels.

- Mitigation. Losses can be reduced through a variety of methods. Demolition, relocation, alteration, and use activity changes are some of the ways damage can be minimized.

- Equality. No one should be subjected to additional risk without receiving an increase in benefit. The public should be treated fairly and equally with appropriate levels of risks and benefits being distributed evenly.

In conclusion, the public can express their feelings on risk acceptance to their councilmen, planning commissioners, and staff. They themselves can decide how much risk they are willing to accept. Many decisions concerning acceptable risk are personal that each individual must make privately. Therefore, it becomes very improbable for the governing body to determine what level of risk all citizens should accept. It will be important to determine appropriate public policy on this issue.

9.5 EXISTING CONDITIONS

Seismic Activities

Kern County is recognized as a high seismic activity area in California. Several major fault lines and their branches criss-cross much of the county. Included in this list are the San Andreas Fault, the Garlock Fault, the Sierra Nevada Fault, White Wolf Fault, Kern Canyon Fault, and Breckenridge Fault. Because of the geologic conditions, the land is susceptible to moderate and severe ground shaking.

Most of the earthquake epicenters and fault lines are located in eastern and southwestern Kern County. Delano is located in the northwestern part of the county. Three minor earthquake epicenters have been designated ten miles southwest of the City. The Pond-Poso Fault Line has been identified six miles southwest of the City. This fault line traverses the area in a northwesterly-southeasterly direction. Although the Pond-Poso Fault has been associated with seismic activity, all of the recorded activity has been to the southwest of the fault line and, therefore, not in the Delano area. The magnitude of these tremors has been in the relatively mild range of 3 to 4 on the Richter Scale. It is thought that this fault represents no serious threat to the activities in the area.

Two minor sub-surface faults running in a northwest-southeast direction through Delano have been identified by William H. Park, Registered Geologist. These two sub-surface faults are located 6,000 and 7,000 feet below sea level. There is no evidence that either of these faults exists on the surface or will have any adverse effects on urban development. As a result, ground shaking potential and fault displacement potential are both low. It must be noted that Delano has not experienced any severe seismic-related activity.

9.6 GEOLOGIC ACTIVITIES

Liquefaction

Liquefaction does not pose a serious threat in the Delano area. There are no known shallow water tables in the area and no significant ground motion activity. There have been no reported incidents of liquefaction hazards in the Delano Planning Area.

Erosion

The hazardous potential of soil erosion is minimized by the low slope grades in the Delano area. The land is flat and no hills or mountains are found in the immediate area. Most of the land has been cultivated and used for urban development or agricultural production. However, wind erosion is prominent in the area due to the agricultural activities in the area.

Flooding

Delano is situated at the base of the Sierra Nevada Foothills. While the geographical setting of the community reduces the significance of flood hazard in the area, flooding problems do exist in certain sections of the community. Ponding is the major flooding problem in Delano with the High Street Pool, the 20th Avenue Pool, the Rag Gulch being identified as flood hazard areas. As the storm water flows through the city in an east to west direction, the elevated Southern Pacific Railroad that runs north to south obstructs water movement from continuing westward. Thus, water is collected in these areas east of the railroad tracks.

The 20th Avenue Pool is located between 18th Avenue and County Line Road while the High School Pool is bounded by 8th Avenue and Cecil Avenue. Conversely, the Rag Gulch flows to the west through the agricultural land from the Friant-Kern Canal. As the water flow approaches Delano, it produces shallow sheet flooding across the airport during high flow periods.
Flood hazard areas are determined by calculating the number of occurrences of flood events at a certain magnitude during designated recurrence intervals. Subsequently, the recurrence interval represents the long-term, average period between floods of a specific magnitude. Hence, a flood hazard area denoted as having 100-year flood capabilities is expected to be equaled or exceeded once on the average during a 100-year period.

As illustrated in Figure 4-3 of the General Plan, the incorporated areas of Delano were divided into various flood potential zones. According to a *Draft Flood Insurance Study - City of Delano* prepared

by Boyle Engineering Corporation in the early 1980's, only two types of zones were identified as having flood hazard characteristics. These zones are listed below:

- Zone AH: Special Flood Areas inundated by types of 100-year shallow flooding and ponding where depths are between one and three feet. This area is defined as south of County Line Road, between the railroad and Girard Street, extending south between the railroad and High Street to 8th Street.

- Zone B: Areas between the Special Flood Hazard Areas and the limits of the 500-year flood; areas subject to certain types of 100-year shallow flooding where depths are less than one foot. This area consists of the Delano Airport vicinity east of the railroad.

Land Subsidence

Land subsidence activity in the Delano area is quite limited. Of the four identified subsidence classifications, only subsidence caused by withdrawal of groundwater is significant. Tectonic subsidence, oil and gas-extracted subsidence, and subsidence caused by hydrocompaction of moisture-deficient alluvial deposits is minimal or non-existent.

The only significant subsidence activity in the Delano area is from the withdrawal of groundwater. The City receives its domestic water supply to serve its residents from groundwater water wells. In addition, most of the area's economy is dependent on the agricultural production industry. Several agricultural wells have been constructed on land surrounding the City to irrigate the table grapes, cotton, alfalfa, and other crops. As a result of heavy demand on the groundwater supply, land subsidence in the area is evident. One possibility of reducing the rate of subsidence from groundwater loss is utilizing Friant-Kern Canal for domestic purposes.

9.7 FIRE-RELATED ACTIVITIES

Structure Fires

The Kern County Fire Department (KCFD), under contract with the City of Delano, responded to 103 fires between July 1995 and July 1998. This includes 81 residential fires, 14 fires in commercial structures, and 8 fires in places of assembly. The prevalent cause of first two categories of fires was electrical short circuits or other electrical failures. The prevalent cause in the last category was arson. The dry hot climate which is common in agriculturally-productive areas in the San Joaquin Valley and the older housing stock in the community also contributed to the number of total fires involved. Homeowner awareness and the strict enforcement of the municipal code will continue to play key roles in fire prevention throughout the City.

Indoor Public Assembly Facilities

Several buildings in Delano are used for public congregation and assemblage. Churches, school auditoriums, and commercial conference rooms as well as restaurants, nightclubs, movie theatres, and social halls are utilized to house large gatherings of people. Some of these buildings were constructed before the new building codes were adopted. In these instances, the electrical wiring and building

construction would be considered inadequate when measured by the present building codes. The Building Department continually inspects many of these buildings to guard against massive panic situations during times of fire.

High Fire Potential Buildings

Most of the high fire potential buildings are older residential and commercial structures located throughout the City. The former type of hazardous buildings generally house low-income families or the elderly. Meanwhile, the commercial structures with high fire potential are family retail and service establishments dating back several years. Many of these buildings have been inspected in recent years and upgraded to meet state and local fire regulations.

Agriculture Fires

The geographical location of Delano and the type of economic base of the community allows the area to be very susceptible to fire fueled by agriculture material. Many crops begin to dry in the summer heat, thus increasing the potential for agriculture fires. Although the KCFD does not currently record these types of fires, the 1982 General Plan update noted that the then-Delano Fire Department responded to over 170 agriculture fire incidents in the previous three years. To guard against agriculture fire potential, the State of California enacted the Public Resources Code Clearance law of 1963. The Clearance Law established the minimum clearance of flammable vegetative growth around structures, especially in brush-and-tree-covered watershed areas. Locally, the City's Weed Abatement Program is used to enforce removal of dry grass and debris from vacant city lots. The County of Kern also maintains fire breaks and weed clearance programs aimed at reducing the volume and the intensity of fire fuel.

9.8 SAFETY HAZARD ISSUES

Issues that are related to seismic, geologic, and fire hazards must be identified before the goals, objectives, and policies of this element can be established. The following issues affect the City of Delano and the Delano Planning Area:

1. **Adequate water supply for fire protection.** Sufficient water quantity and water pressure must be maintained to aid fire-fighting units in controlling fires. This is extremely important during the summer months when resident usage is high. The City water system with its water wells, storage tanks, and intricate pipelines must continue to distribute adequate water pressure to proposed and existing projects.

2. **Community acceptance to a certain degree of risk.** The citizens must be willing to accept a certain amount of risk from seismic, geologic, and fire hazards. Although there are methods to greatly minimize hazardous consequences, the costs become prohibitive.

3. **Continual subsidence from groundwater removal.** Land in the Delano Planning Area is continually experiencing subsidence because of the removal of groundwater for agricultural production and human consumption. The gradual lowering of the surface may create adverse

long-term effects. More efficient water usage and the possibility of tapping into the FriantKern Canal system to serve domestic needs are two of the alternatives that could be considered to alleviate the subsidence hazard.

4. **Agriculture fire dangers within the City and throughout the Delano Planning Area.** Several neighborhoods located around the perimeter of the City are subject to the dangers to agriculture fires. Control of dry weeded areas is important for the protection of the houses in close proximity. Vacant lots in the City also pose a fire safety problem.

5. **Cognizance of known seismic activity potential within Kern County.** Although no active fault lines are noted in the Delano Planning Area, several dangerous fault lines exist within Kern County. The San Andreas Fault, the Garlock Fault, the White Wolf Fault, and the Sierra Nevada Fault pose a significant potential problem for county residents. Measures must be taken to inform the people and to reduce the impacts of destructive seismic activity.

SAFETY ELEMENT POLICIES

9.9 SAFETY ELEMENT GOALS, OBJECTIVES, AND POLICIES

Objective

A. Promote minimal loss of life, bodily injury, and property damage from seismic and other geologic occurrences, flooding, and other environmental hazards.

Policies, Standards

1. Reduce the loss potential of life and property caused by earthquakes and resultant effects.

   a. Require that seismic considerations be included in all areas identified as having significant earthquake potential.

   b. Retain geologically hazardous areas, which are unsuitable for human occupancy, as open space. (Note: See Safety Hazard Action Programs)

   c. Insure that future structures built in high seismic-potential areas conform to the guidelines established in the Uniform Building Code: Earthquake Regulations.

   d. Support the adopted Kern County Emergency Plan showing evacuation routes and protective safety procedures.

   e. Coordinate with other governmental agencies to establish plans and programs that would improve the protection against seismic dangers.

2. Protect community residents from the hazards of flooding.

   a. In areas deemed by the Federal Emergency Management Agency (FEMA) or the City Engineer as being within the 100-year flood zone, all proposed development must implement appropriate protective measures. These measures, subject to the approval by the City Engineer, shall not adversely affect drainage of surrounding properties, and shall not increase the flood potential in the area. One of the protective measures shall include a provision that the construction pad of the project shall be less than one foot above flood elevation.

   b. Encourage the usage of high flood hazard areas as open space or limited recreational uses.

3. Tentative maps will be routed to the California Department of Conservation's Division of Oil, Gas and Geothermal Resources Bakersfield office during initial environmental review for comment and appropriate conditions of approval in situations where future development may be affected by existing or abandoned wells or other mineral extraction facilities.

Objective

B. Provide adequate fire protection services throughout the Delano Planning Area.

Policies, Standards

1. Promote and encourage adequate fire control within the Delano Planning Area.

   a. Ensure that all sectors of the City maintain adequate water pressure and water supply for fire fighting purposes.

   b. Maintain an effective and well-trained Fire Department that will protect the community from fire danger, meeting the Kern County Fire Department standard of one fire company for every 14,000 residents.

   c. Retain a viable inter-governmental fire protection service to adequately protect the residents in the outlying areas.

   d. Continue and maintain weed abatement and brush clearance to reduce fire danger throughout the community.

   e. Utilize proper mitigation measures to protect new development from areas with high brush fire potential.

Objective

C. Provide adequate law enforcement services to the City.

Policies, Standards

1. Maintain police staffing ratios of 1.4 equivalent officers for every 1,000 persons to the extent feasible. An equivalent officer includes non-sworn field staff.

2. Promote public and private efforts aimed at increasing community awareness about the danger of fire.

    a. Educate the public about the hazards and effects of fires throughout a variety of promotional and informational programs to minimize the potential danger.

    b. Encourage and promote improved fire and geologic hazard insurance programs.

9.9.1 Safety Hazard Action Programs

1. The City should utilize those lands that have been identified as being hazardous for human occupancy and designated as "open space areas" for agriculture, natural wildlife habitats, and limited recreation purposes.

2. The City Engineer shall conduct, or cause to be conducted, appropriate soils tests for all projected new public buildings to determine the suitability for the proposed construction.

3. The Building Department shall continue to enforce the earthquake requirements of the Uniform Building Code for future buildings and structures.

4. Identified geologic hazards in a proposed subdivision should be referenced on the submitted final subdivision map.

5. The Public Works/Engineering Department shall enforce the Uniform Building Code requiring geological and soils engineering investigations in identified significant geologic hazard areas.

6. The City Council should support the adoption of State legislation requiring improved site design and construction standards for emergency facilities, (i.e., police and fire stations, emergency communication centers, community fallout shelters).

7. All significant and important buildings constructed prior to 1946 should be inspected by a structural engineer for potential hazards. Since many of these buildings have regional impacts, the source of funding for the inspection program should be at the regional level.

8. The City should introduce and support community programs that train the general public to assist police, fire, and civil defense personnel during periods of seismic occurrences.

9. The City should consider preparing contingency plans for the provision of an emergency water supply in the Delano Planning Area.

10. The Fire Marshall and the Chief Building Official shall insure that all buildings are designed and equipped for an adequate level of fire protection.

11. The City Fire Department shall continue to drill and train a variety of preparedness tests to meet all emergency situations.

12. The Fire Department should maintain an updated fire hazard potential map, indicating areas with high brush fire dangers and areas with limited access.

13. The City should construct and develop new water wells, wherever feasible, to increase water supply and water pressure, thus insuring adequate fire protection in existing and future developments.

14. The Fire Marshal shall, in conjunction with the Chief Building Official, require the installation of smoke detectors in residential dwelling units.

15. The City should introduce and support community programs that train the general public to assist the police, fire, and civil defense personnel during periods of fire or flood.

16. The Building Department should maintain an updated inventory of potentially fire hazardous buildings.

17. The County of Kern's Road Department will be encouraged to reduce roadside fires through brush, weed, and trash removal.

18. The City should continue its annual Weed Abatement Program eradicating weeds, combustible litter, and waste materials from lots within city boundaries.

19. The City shall adhere to the designated flood hazard areas as identified in the Kern County Insurance Study for the City of Delano.

20. The City shall require that all development located within designated flood hazard areas be required to construct at least one foot above flood elevation. (See Action Program 20.)

21. The City shall continue coordination and cooperation with local water district to assure wise management of the natural resources and to discourage unnecessary groundwater withdrawal.

23. The City shall continue to enforce the regulations established in the Uniform Building Code, Uniform Mechanical Code, Uniform Plumbing Code, Uniform Fire Code, Uniform Dangerous Building Abatement Code, and other model codes adopted by the City to guarantee sound development.

24. The City shall work with county, regional and state agencies to explore new and innovative techniques and programs to reduce land subsidence in the area.

25. To prevent future problems associated with land subsidence, the City shall continue to enforce Title 14 - Section 2907 of the Municipal Code pertaining to foundation requirements. All concrete and masonry foundations for residential occupancy must be reinforced by a minimum of two continuous deformed bars.

ECONOMIC DEVELOPMENT ELEMENT

10.0

ECONOMIC DEVELOPMENT ELEMENT

10.1 INTRODUCTION

The Economic Development Element discusses how business activity and employment in Delano may be enhanced. It also identifies key areas where efforts to promote new business should be focused to best serve the city's interests. The California Government Code does not require cities to include economic development chapters in their general plans; however, economic development is a key community objective, and is closely related to land use, transportation, and other planning issues, and successful economic growth increases City revenue and Delano's ability to implement programs identified in other General Plan chapters. Therefore, the City of Delano has chosen to devote a full General Plan chapter to economic development in order to set forth a strategic policy for guiding the economic growth of the community.

ENVIRONMENTAL SETTING

10.2 POPULATION

As of January 1, 20045 the City's population was estimated to be 45,056, approximately 6,006 of which were in group quarters at the State prison. Population projections presently acknowledged by the City indicate the average annual growth rate is expected to be five percent through the year 2020 when the City's population is anticipated to be over 62,000 residents. However, based on trends since the completion of the 2000 U.S. Census, the City is currently experiencing an average annual growth rate of 2.1 percent. Additional prison development will potentially increase the City population by 5,000 more persons. Table 2-1 shows these projections.

Table 10-1
City of Delano Population

Population Projections Based Upon Existing Trends						
Year	1990	1998	2000	2004	2010	2020
Population	22,762	34,143	38,824	43,200	49,352	62,485

*Delano will add 5,000 not included within these projections.

10.3 SOCIAL AND ECONOMIC FACTORS

Delano is the second largest city in Kern County. The Delano region ships hundreds of millions of dollars worth of commodities throughout the United States and to over 80 foreign countries. Delano's rapidly growing population, temperate climate, low utility rates, centralized location, affordable land costs, and large labor pool make it an outstanding location for business retention and expansion. In late 2003 – early 2004 it was estimated that the total retail demand in the retail trade area (a fifteen mile radius around the City) was $518 million and would grow to nearly $697 million in 2005. Goods and services of the automotive group, general merchandise, food stores and restaurants are, and are expected to continue to have a high demand.

The 2000 census identified that the civilian workforce was divided among the five following occupational categories: 15.7 percent employed in management, professional and related occupations; 15.2 percent in service occupations; 19.9 percent in sales and office occupations; 25.8 percent in farming, fishing and forestry occupations; and 18.6 percent in production, transportation, and material moving occupations. These five categories represented approximately 95 percent of the employed citizens of the City. However, only 42.9 percent of Delano residents 16 years and over (who are classified as "worker") worked within the City of Delano. Almost sixteen percent of those identified as employed outside the City reported that they worked outside of Kern County.

Due to the continuing growth in retail sales within the City's retail trade area it is important that the City adopt a set of goals, policies and standards that recognize and support the City's economic development.

In addition to the inclusion of an optional economic element within the General Plan, a Strategic Economic Development Plan has been prepared as an implementation tool to provide more specific guidance in expanding current and/or generating new economic activity within the community. The strategies in the Strategic Economic Development Plan are intended to be implemented in the short term (five to seven years) and are to be prioritized on an annual basis. Eight strategies were identified for inclusion in the Strategic Economic Development Plan by the City after the review of various data and information including: a market analysis prepared by a professional services firm; data from the City's Community Development Department; input from community leaders and members during an extensive visioning process in 2000-2002; review of online demographic data; and a review of the City's 1990 Strategic Economic Development Plan. The strategies identified in the plan include:

- provide leadership;
- instill high community standards;
- building infrastructure through sound fiscal policy;
- invest redevelopment district tax increments; target geographic sites for business development;
- encourage interagency collaboration;
- attract, retain and expand business; and

- develop the workforce.

For the year 2002 the City had total taxable sales of $194,983,000, including $166,773,000 in retail sales. Of the retail figure, auto dealers and auto supplies had commanding taxable sales of $46,361,000. General merchandise stores and food stores had taxable sales of $28,210,000 and $23,410,000 respectively.

ECONOMIC DEVELOMENT ELEMENT POLICIES

10.4 ECONOMIC DIVERSIFICATION

Objectives

A. The promotion and facilitation of economic diversification to encourage the creation of employment opportunities, increase revenue through the local economy and decrease dependency upon any one sector of the economy.

Policies, Standards

1. Target specific industries compatible with the community and labor force for recruitment, including industries that can provide employment for local residents, generate sales tax income directly or indirectly, and can be developed in a manner that fits in with the residential nature of the community.

2. Enhance the community's role as the regional commercial and industrial center for both northern Kern County and southern Tulare County.

3. Develop and implement a marketing and promotion plan focused on maintaining a positive business climate in the city.

4. Encourage and facilitate local entrepreneurial and expansion efforts

5. Establish a Delano "Red" Team to provide ongoing support for implementation of the City's Strategic Economic Development Plan.

6. Encourage new and continuing economic growth at specific geographic sites within the city, including but not limited to: the downtown area; Block H (the Delano Redevelopment Agency's 16-acre project); Industrial Parks; and the State Route 99 interchange at Woollomes Avenue.

7. Attract, expand and retain businesses within the City limits.

8. Continue to develop lands along County Line Road to enhance the visual quality of that important entrance to the City by targeting highway commercial uses that are compatible with surrounding agricultural lands.

9. Develop State Route 99 as an integral corridor through the community, emphasizing land uses and architectural designs that portray an economically successful community.

10. Support the Implementation Plan of the City of Delano Redevelopment Agency, including the development of Block H to provide a visual and functional linkage between the downtown and State Route 99.

11. Capture transient dollars flowing along the State Route 99 corridor to the greatest extent possible by providing lands for and encouraging the development of highway-oriented commercial use and large-scale retail uses serving Delano and surrounding areas.

10.5 INFRASTRUCTURE POLICIES

Objectives

A. The adoption and implementation of plans and financing for infrastructure to support future growth and development.

Policies, Standards

1. Maximize the use of existing infrastructure, underutilized sites, and vacant properties.

2. Preserve the downtown business district as the heart of the community with continued support for existing and future revitalization efforts, emphasizing financial, public agency, specialty retail, and entertainment uses.

3. Adopt and implement plans and financing for water, sewer, roadway and highway, parks and other infrastructure to support future growth and development.

4. Utilize Redevelopment tax increments to retire existing debts of the Delano Redevelopment Agency.

5. Continue to apply for appropriate grants to supplement infrastructure projects.

10.6 ECONOMIC DEVELOPMENT COORDINATION

Objectives

A. The coordination and networking with local, regional and state economic development agencies, work preparation agencies, educational agencies and the public.

Policies, Standards

1. Advocate for the location of governmental service agencies within the city limits of Delano.

2. Actively promote the Strategic Economic Development Plan to the public including the Community Alliance and Partners Network.

3. Investigate the feasibility of establishing a downtown business improvement district.

4. Identify and promote educational opportunities to meet the needs of employers.

10.7 STRATEGIC ECONOMIC DEVELOPMENT PLAN POLICES

Objectives

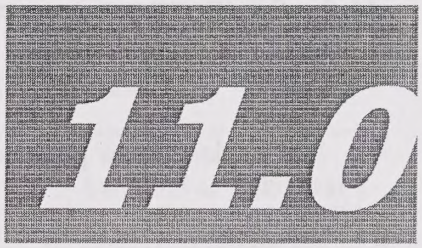
B. The support and implementation of the Strategic Economic Development Plan

Policies, Standards

1. Annually prioritize the strategies of the Strategic Economic Development Plan: provide leadership; instill high community standards; build infrastructure though sound fiscal policy; invest redevelopment increments; target geographic sites for business development; encourage interagency collaboration, attract, retain and expand business; and develop the workforce.

2. Initiate strategic fiscal investment plans.

3. Annually review the Strategic Economic Development Plan to ensure its consistency and relevancy with the growth, opportunities and resources within the community of Delano.



PARKS AND RECREATION ELEMENT

11.1 INTRODUCTION

The Parks and Recreation Element establishes the goals, policies, and programs which guide the development of parks, trails, bikeways, and other recreational facilities throughout the City. Providing passive and active recreational opportunities is an important municipal service that reflects and enhances the community's quality of life.

The Parks and Recreation Element has a direct relationship with the Open Space and Conservation Element of the General Plan, in that each of these elements seeks to conserve and maintain the City's open space and natural resources. The Parks and Recreation Element also has connections ot the Land Use Element. The land use map identifies existing and proposed park sites and recreational facilities, and helps determine the compatibility of adjacent land uses.

11.2 AUTHORIZATION

A number of California statutes address the provision of community parks and recreational amenities. Government Code Section 65560 requires that the General Plan include a discussion of areas particularly suited for parks and recreational purposes, including areas with links between major recreation and open space reservations and trails. Section 65561 states that the preservation of park land is necessary not only for the maintenance of the economy, but also for the continued assurance of land for recreation and the enjoyment of scenic beauty. The statutory references for park land delineations are found in the Subdivision Map Act. Specifically, Government Code Sections 66477 and 66479 enable local governments to require park site dedications, or fees in lieu of dedication, as conditions of subdivision and parcel map approval. Recreational land uses are included in the description of land use elements in Section 65302(a). Trail designations are also required as part of Section 5076 of the Public Resources Code.

11.3 OBJECTIVES AND POLICIES

Objectives

A. Provide diverse passive and active recreational opportunities for all age groups in the City.

B. Construct local parks, community parks and regional parks as needed to serve the projected future population growth of the community.

C. Construct three community parks in the northwest, southwest, and southeast quadrants of the City along with one regional park.

Policies, Standards

1. Distribute adequate parks facilities throughout the City to provide organized and informal recreational opportunities and open space for City residents.

2. Provide recreational programs that meet the needs of children, adults and senior citizens in the City.

3. Provide an appropriate ratio of passive and active uses for each park type. Ensure that all parks provide the potential for passive, restful relaxation. A major portion of some parks shall be for passive activity while a portion of other parks may be for active recreation.

4. Improvement to existing parks shall be primarily in the form of upgrading the quality of existing facilities and improvements to accommodate new residents. This shall be achieved by either remodel or redevelopment. Facilities shall be constructed which are durable and require low maintenance, whenever possible.

5. Other improvements to existing parks shall be for the purpose of reducing maintenance costs, water use, improving safety and aesthetics.

6. The standard park acreage for residents is 3.0 acres per 1,000 people. This acreage may include school district property, which is available for use by the public during non-school hours, park ponds (to the extent that they are accessible and usable recreational areas), neighborhood parks, pocket parks, community parks and community recreational facilities. Consideration should be given to development of active recreation and sports areas in conjunction with existing and new school facilities. Recreational facilities should be provided in accordance with the standards in Table 4-4. It is the City's intent to utilize the maximum allowable park acreage standard (up to 5.0 acres per 1,000 people) should the availability of school facilities for use by the public during non-school hours increase the amount of usable park land within the City above 3.0 acres per 1,000 population.

7. Parks shall be located along collector roads wherever possible.

Table 11.1
Parks and Community Standards and 2025 Demands

Facility Description	Facility Standard	Facility/Unit Standard	Additional Needed Facilities at Build Out
Park Acreage	5 acres	Per 1,000 persons	150 acres
Swimming Pool	1 pool	Per 30,000 persons	1
Community Center	1 center	Per 30,000 persons	2
Golf Course	9 holes	Per 30,000 persons	1
Tennis Courts	4 courts	Per 10,000 persons	3
Basketball Courts	4 courts	Per 5,000 persons	6
Baseball Fields	1 field	Per 5,000 persons	6
Soccer Field	1 field	Per 10,000 persons	3

8. Where advantageous, parks should be developed in conjunction with school property to create a larger combined open space and recreation facility for the community and to reduce the costs for parks and recreation facilities.

9. Where possible, parks should be developed in conjunction with existing and future drainage basins to create a larger combined open space along with additional space for active and passive recreation. Existing park ponds should be adapted for park use where possible. Safety concerns must be addressed and adequate space at or above street level should be provided.

10. Park facilities should be provided in each area of the City.

11. Neighborhood park facilities may be contained within community parks.

12. Provide active recreation facilities in several locations in the City to accommodate community needs.

13. Community facilities of a specialized nature may be developed to serve the particular needs of the community including soccer fields, spray pads (water facility), skate parks, etc.).

14. Not all community facilities should occur at each community park; they should be based on need, and should occur at various City parks.

15. The active community sports parks should be lighted for extended hours of use when it does not conflict with adjacent land uses.

16. Community parks should have some active recreational facilities. These facilities may be a single ball field, a pair of tennis courts, a group of basketball courts or a group of picnic

areas. At the maximum level, these facilities may include a complex of ball fields, a sports center or a swimming pool.

17. Parks shall be protected from intrusion by others. Areas designated for park sites shall be preserved through zoning or the specific plan process. Alternative sites to those shown on the Land use Map may be permitted through a General Plan Amendment.

18. The City will review the Parks and Recreation Master Plan at least every five years to consider changing priorities and schedules for acquisition and development to implement the General Plan.

19. The City will coordinate with public schools, private industry and commercial developers to attain maximum use and minimum duplication in the cost of park and recreation facilities.

20. Where a county-wide recreation need is demonstrated in an area adjacent to the City, cooperative park development programs should be encourage on a cost-sharing basis. Joint power agreements between the City and County agencies may be developed to implement such parks with financial aid management obligations in proportion to each other's responsibilities.

21. If a subdivision, site plan, general plan amendment or rezoning is proposed on land which is designated for potential park use, prior to entitlements, permits or other approvals, the City Council shall determine the feasibility of accelerating public acquisition of the property, or redesignate alternative areas.

22. When a site designated for a park is part of a subdivision map, the City may require the subdivider to dedicate the park area and prepare plans for its phased development. Development of the park proposal shall be consistent with this element and the Parks and Recreation Master Plan.

23. Actively seek State, Federal and local grants to improve City recreation services and facilities.

24. Maintenance costs should be within the City's financial ability. Where necessary, the City may require the developer to establish financing mechanisms.

25. Support the establishment of public non-profit corporations with the purpose of promoting and supporting City park and recreation services and facilities for the general public.

26. Aggressively promote the use of volunteers and community groups for the provision of recreation programs, services, operation and maintenance and development of parks.

27. Parkland acreage dedication obtained through the provisions of California Government Code section 66477 shall be consistent with the Delano Municipal Code, Section 16.34.

28. The Community Services Department shall encourage economically self sufficient recreation activities by implementing user fees, facility fees and registration fees in its program(s).

29. Commercial recreational sites can be considered as viable alternatives to the dedication provided no more than ten percent of the planned park acreage is comprised of commercial recreation.

30. Parks should be designed and include facilities and equipment to meet the needs of a diverse community.

31. New parks shall be located in close proximity to the neighborhoods they are intended to serve and shall be designed as a gathering place for family, neighborhood and community functions.

32. Gazebos and shade structures and other similar facilities shall be located within neighborhood parks so as to foster a gathering place for family and neighborhood events.

33. Community parks with a size of 20-30 acres each should be developed in the northwest, southwest, and southeast quadrants of the City along with one regional park.

34. The City's Community Services Department shall implement a program to rent out park facilities and equipment for use within the City's parks by families, groups and neighborhoods.

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